

APPLICATIONS FOR ADMISSION AND FOR TRANSFER

The Constitution provides that the Board of Direction shall elect or reject all applicants for *Admission* or for *Transfer*, and, in order to determine justly the eligibility of each candidate, the Board must depend largely upon the Membership for information.

This list is issued to members in every grade for the purpose of securing all such available information, and every member is urged to scan carefully each monthly list of candidates and to furnish the Board with data in regard to any applicant which may aid in determining his eligibility. It is the *Duty* of all *Members* to the *Profession* to assist the Board in this manner.

It is especially urged, in communications concerning applicants, that errors in the record be pointed out and a *Definite Recommendation as to the Proper Grading in Each Case* be given, inasmuch as the grading must be based upon the opinions of those who know the applicant personally, as well as upon the nature and extent of his professional experience. If facts exist derogatory to the personal character or to the professional reputation of an applicant, they should be promptly communicated to the Board. *Communications Relating to Applicants are considered by the Board as Strictly Confidential.*

The Board of Direction will not consider the applications herein contained from residents of North America until the expiration of thirty (30) days, and from Non-Residents of North America until the expiration of ninety (90) days from December 1, 1926.

MINIMUM REQUIREMENTS FOR ADMISSION

Grade	General Requirement	Age	Length of Active Practice	Responsible charge of work
Member	Qualified to design as well as to direct work	30 years	10 years*	5 years
Associate Member	Qualified to direct work	25 years	6 years*	1 year
Junior	Qualified for sub-professional work	18 years†	2 years*	
Affiliate	Qualified by scientific acquirements or practical experience to co-operate with engineers			
Fellow	Contributor to the permanent funds of the Society			

* Graduation from a school of engineering of recognized reputation is equivalent to 2 years' active practice.

† Membership ceases at age of 32 unless transferred to higher grade.

APPLICATIONS FOR ADMISSION AND FOR TRANSFER

LIST OF APPLICANTS.

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The fact that applicants give the names of certain members as references does not necessarily mean that such members endorse.

The number in the center above each record indicates the serial number of the applicant for the current year, and that at the left the district in which he resides.

The abbreviations in *Italics* represent, respectively, *TT*, Total Time; *SP*, Sub-Professional Work; *P*, Professional Work; *RC*, Responsible Charge; *D*, Design. The figures showing the amount of time spent in Responsible Charge and on Design are the estimate of the Applicant. The allowance of two years for graduation and of one-third of a year for each academic year successfully completed in an engineering college without graduation is included in Total Time and Sub-Professional Work.

FOR ADMISSION

1333

(4) **BACK, NICHOLAS VALENTINE**, 1728 N. Third St., Philadelphia, Pa. (Age 22. Born St. Phillip, Hungary.) 1926 B. S. in C. E., Pa. State Coll. *TT* 2: *SP* 2. June to Sept. 1925 Instrumentman for Stone & Webster, Inc. *TT* 0.2: *SP* 0.2. July 1926 to date with Pennsylvania Dept. of Highways as Mixer Inspector on reinforced concrete roads. *TT* 0.3: *SP* 0.3. *TT* 2.3: *SP* 2.3. Refers to C. H. Buckius, R. O'Donnell, R. L. Sackett, E. D. Walker.

1334

(1) **BAGLEY, HARRY HOWE**, 482 Burton Ave., Hasbrouck Heights, N. J. (Age 20. Born Fairview, N. J.) 1926 B. S., Cooper Union. May 1924 to March 1925 Mech. Draftsman, Kelvin Eng. Co., detailing sugar-mill machinery. *TT* 0.8: *SP* 0.8. March 1925 to April 1926 Draftsman, Estimator and Checker, Petroleum Heat & Power Co., on fuel oil-burning systems for heating and power plants. *TT* 1.1: *SP* 1.1. April 1926 to date Detailer, Turner Constr. Co., structural reinforced concrete. *TT* 0.5: *SP* 0.5. *TT* 2.4: *SP* 2.4. Refers to H. R. Codwise, F. E. Foss, H. G. Hauck, G. Morrison, J. P. J. Williams.

1335

(11) **BARTLETT, MAX CVRIL**, 249 North Euclid Ave., Pasadena, Cal. (Age 34. Born Ellsworth, Wis.) 1913 B. S. in Civ. Eng., State Coll. of Wash. *TT* 2: *SP* 2. Feb. 1911 to March 1912, June-Oct. 1912 and Feb. 1914 to March 1915 Rodman, Instrumentman and Draftsman, Washington Water Power Co., on hydro-electric plant construction. *TT* 2.3: *SP* 2.3. June 1913-Jan. 1914 and March 1915 to Oct. 1916 Draftsman, Inspector and Res. Engr., State Highway Dept. of Washington, on plans, location and construction. *TT* 2.1: *SP* 0.6: *P* 1.5: *RC* 1. Oct. 1916-Jan. 1917 Asst. City Engr., Pullman, Wash., in charge of paving construction. *TT* 0.3: *P* 0.3: *RC* 0.3. Feb. 1917 to March 1918 Highway Engr., Whitman County, Wash., in charge of construction and location. *TT* 1.1: *P* 1.1: *RC* 1.1: *D* 0.3. March to Sept. 1918 Engr., Idaho State Highway Dept., on location, plans and estimates. *TT* 0.5: *P* 0.5: *RC* 0.5: *D* 0.3. Sept. 1918 to March 1919 Engr., U. S. Reclamation Service, Yakima, on surveys, topography and estimates, Kittitas Project. *TT* 0.5: *P* 0.5: *RC* 0.3. March 1919-Jan. 1921 City Engr., Toppenish, Wash., in charge of paving, sewer and water extensions (\$500 000), maintenance of streets and sewers, and of building, electrical and sanitary inspections. *TT* 1.8: *P* 1.8: *RC* 1.8: *D* 0.8. Feb. 1921-Dec. 1923 Engr. and Supt. of Constr., Standard Asphalt Paving Co., Spokane, on highway, paving, sewer and water-works construction. *TT* 2.9: *P* 2.9: *RC* 2.9. 1924 Supt., Chanute Constr. Co., on filtration-plant construction, Lewiston, Idaho. *TT* 1: *P* 1: *RC* 1. Feb. 1925 to date Engr., Burns-McDonnell-Smith Eng. Co., on supervision of construction, reports and design, water-works and sewerage projects, Port Angeles, Wash., Pocatello and Montpeller, Idaho, Needles and Ventura, Cal. *TT* 1.7: *P* 1.7: *RC* 1.7: *D* 0.7. *TT* 16.2: *SP* 4.9: *P* 11.3: *RC* 10.6: *D* 2.1. Refers to H. J. Doolittle, F. C. Dunham, R. E. McDonnell, F. H. Pickett, C. A. Smith, A. J. Turner, O. L. Waller.

1336

(6) **BEARD, VIVIAN DANGERFIELD**, 71 Sixteenth St., Ambridge, Pa. (Age 37. Born Prairie City, Iowa.) 1909 B. C. E., Iowa State Coll. *TT* 2: *SP* 2. 1909 to 1911 Instructor, C. E. Dept., Iowa State Coll. *TT* 2: *SP* 2. 1911 to 1914 Structural Steel Detailer, and

1914 to date Designing Engr., American Bridge Co.; has had charge of engineering and design of some large bridges and buildings. TT 15: SP 3: P 12: RC 6: D 6. TT 19: SP 7: P 12: RC 6: D 6. Refers to L. J. Affelder, C. W. Bryan, J. L. deVou, R. Khuen, Jr., J. F. Leonard, P. J. Reich, C. B. Stanton.

1337

(11) BINDER, REUBEN WILLIS, 112 South Berendo St., Los Angeles, Cal. (Age 26. Born Philadelphia, Pa.) 1922 B. S. in C. E., Univ. of Pa. TT 2: SP 2. June 1922 to date with McClintic-Marshall Co., Pittsburgh, Pa., as follows: June 1922 to May 1923 Draftsman on steel details, setting foundations, etc.; May 1923 to Sept. 1924 Asst. Engr. on estimate and design; Sept. 1924 to Feb. 1925 Field Engr., on inspection and general engineering; Feb. 1925 to Feb. 1926 Asst. Engr. on design of bridges and buildings; since Feb. 1926 Engr. in charge of estimates and design. TT 4.4: SP 0.7: P 3.7: RC 1.3: D 1.1. TT 6.4: SP 2.7: P 3.7: RC 1.3: D 1.1. Refers to E. F. Ball, H. C. Berry, E. A. Gibbs, E. T. Grandtlenard, J. Jones, R. MacMinn, R. A. Pendergrass, G. L. Taylor.

1338

(15) BLACK, ROBERT CLYDE, City Hall, Beaumont, Tex. (Age 30. Born Skidmore, Tex.) 1917 C. E., Tex. Agri. and Mech. Coll. TT 2: SP 2. 1917 to 1919 (10 months overseas) with U. S. Engrs., narrow gauge railways. July 1919 to Feb. 1920 Instrumentman, Missouri, Kansas & Texas Ry. TT 0.6: P 0.6. Feb. 1920 to Aug. 1921 Asst. Engr., City of Beaumont Tex., drafting, etc. TT 1.5: P 1.5. Aug. 1921 to Jan. 1923 Asst. County Engr., Washington County, Tex., on paving of concrete road (35 miles) and location of new highway (24 miles). TT 1.4: P 1.4: RC 1.4. Jan. 1923 to date with City of Beaumont, until Jan. 1925 as Asst. City Engr. and since then City Engr. in charge of street paving (\$1 500 000), sewers (\$200 000), wharf (\$375 000), swimming pool (\$40 000), 5 miles of railroad, wharf warehouse (\$50 000), cotton compress (\$86 000), etc. TT 3.8: P 3.8: RC 3.8. TT 9.3: SP 2: P 7.3: RC 5.2. Refers to J. F. Coleman, A. C. Love, J. C. Nagle, J. J. Richey, O. A. Seward, Jr.

1339

(13) BLOOD, CHARLES READER, 1325 H Street, Sacramento, Cal. (Age 38. Born York, Nebr.) 1913 B. S., Univ. of Cal. TT 2: SP 2. June 1908 to Sept. 1909 Engr. Asst. to City Engr. and County Surveyor, York County, Nebr., on surveying, laying out subdivisions, street paving and construction of outfall sewer; acted as Rodman, Chainman, Levelman and Transitman on inspection of sewer and street paving construction and drafting. TT 1.2: SP 1.2. April to Nov. 1910 Levelman and Transitman, Madeline Meadows Land and Irrigation Co., Madeline, Cal. TT 0.6: P 0.6. July to Nov. 1913 Computer and Inspector, Grand Trunk Pacific R. R., measuring and computing quantities of excavation, inspecting concrete and steel reinforcing during construction of tunnel lining. TT 0.4: P 0.4. Oct. 1919 to Sept. 1926 with California Highway Comm., as follows: Oct. to Dec. 1919 Asst. Res. Engr. on Construction; Dec. 1919 to May 1922 Draftsman, Headquarters Office; May 1922 to Nov. 1923 Asst. Engr., Maintenance Dept.; Nov. 1923 to July 1925 Office Engr., Maintenance Dept.; July 1925 to Sept. 1926 Asst. Maintenance Engr. TT 7.1: P 7.1: RC 2.8. Sept. 1926 to date Asst. Engr., City of Sacramento, Cal. TT 0.2: P 0.2: RC 0.2. TT 11.6: SP 3.3: P 8.3: RC 3. Refers to S. A. Hart, J. C. McLeod, R. M. Morton, C. S. Pope, R. H. Stalnaker, J. E. Tempest, A. J. Wagner.

1340

(6) BROEREN, JOHN N., Y. M. C. A., Third and Wood Sts., Pittsburgh, Pa. (Age 23. Born Morrow, Ore.) 1925 B. S. in Civ. Eng., Univ. of Wash. TT 2: SP 2. June 1922 to Oct. 1923 Rodman, Computer, and Transitman, and June to Oct. 1924 Transitman and Field Engr. on tressel, derrick and railroad work in quarry development, also in charge of field parties on dam location, all for Lyman Griswold. TT 1.1: SP 1.1. June to Oct. 1925 Computer, Longview Co., on paving quantities. TT 0.3: SP 0.3. Oct. 1925 to June 1926 graduated student, advanced structural design, Univ. of Washington. TT 0.7: P 0.7. July 1926 to date Estimator, C. H. Nelson & Son, Contrs. TT 0.3: SP 0.3. TT 4.4: SP 3.7: P 0.7. Refers to W. F. Allison, I. L. Collier, L. Griswold, J. B. Hamilton, C. C. More.

1341

(1) CANALS, JOSE MANUEL, P. O. Box 436, San Juan, Porto Rico. (Age 27. Born San Juan, Porto Rico.) Aug. 1920 to June 1921 Student, Villanova (Pa.) Coll. Sept. 1921 to Feb. 1924 Student, Civ. Eng., Cornell Univ. TT 0.7: SP 0.7. Jan. 1916 to July 1919 Asst. to J. A. Canals, on surveying, levelling and estimating fire losses in buildings. TT 3.6: SP 3.6. July 1919 to Jan. 1920 Asst. to A. M. Martinez, Civ. Engr., on construction of "San Jorge" Church, Santurce Dist. TT 0.5: SP 0.5. Feb. to July 1920 Asst. to City Engr., San Juan, Porto Rico. TT 0.5: SP 0.5. Aug. to Sept. 1921 designed 2-story residence. Summers 1922 and 1923 Asst. Engr. for J. A. Canals, on

design of water works for San Juan. March 1924 to date Gen. Contr., designing, surveying, railroad location and appraising fire losses. *TT 2.7: P 2.7: RC 2: D 0.4. TT 8: SP 5.3: P 2.7: RC 2: D 0.4.* Refers to M. V. Domenech, M. Font, A. S. Luchetti-Otero, R. Ramirez, A. Rodriguez, E. Totti y Torres, C. del Valle Zeno.

1342

(1) CASS, MICHAEL JAMES, 23 Clyde St., Surrey Hills, Melbourne, Victoria, Australia. (Age 46. Born Nairne, South Australia.) Gained Municipal Engr.'s Certificate, New South Wales Govt., Sydney, N. S. W., Australia. Jan. 1896 to Feb. 1901 Apprentice, James Martin & Co., Mech. Engrs., Gawler, South Australia, on locomotive engine construction, etc., structural design and computations. *TT 5: SP 5: D 2.* March 1901 to Jan. 1905 with Smith & Timms, Contrs., on railway survey and construction, West Australia, locating line and setting out works, drafting and design of structural works. *TT 4: SP 1: P 3: D 1.* April 1905 to Nov. 1907 Asst. Surveyor, Proprietary Mine, Broken Hill, N. S. W., surveys and plans of underground workings. *TT 2.5: SP 1: P 1.5: D 1.* Oct. 1907 to March 1909 Asst. Eng. Surveyor, Adelaide Municipal Tramways Trust, surveys of electric tram routes and construction of permanent way, bridges and buildings. *TT 1.5: P 1.5.* May 1909 to Nov. 1912 Engr. in Chg. of railway construction, including tunnels and several important steel bridges (cost £756 000), for Smith and Timms, Contrs. *TT 3.5: P 3.5: RC 3.5.* Nov. 1912 to Sept. 1914 Works Engr., North Coast Ry., Public Works Dept., New South Wales, on construction of permanent way, bridges and heavy earthworks. *TT 1.8: P 1.8.* March 1915 to Dec. 1918 Engr., in Chg. of railway construction, including several tunnels and bridges, for Norton Griffith, Contrs., responsible for staff and works. *TT 3.7: P 3.7: RC 3.7.* Jan. 1919 to Jan. 1920 Engr. in Chg. of electric tramway construction, Tookeray Tramway Trust, Victoria, responsible for construction of permanent way and buildings. *TT 1: P 1: RC 1.* April 1920 to date Engr. in Chg. of collection of survey data for electrification of Melbourne Tramways (estimated cost £9 000 000); 1921 appointed Chf. Asst. Permanent Way Engr. in charge of designs for change from cable to electric traction; since May 1922 Permanent Way Engr. in charge of maintenance, construction and change of cable tracks (annual expenditure £1 500 000). *TT 4.7: P 4.7: RC 4: D 1. TT 27.7: SP 7: P 20.7: RC 12.2: D 5.* Refers to J. T. N. Anderson, W. M. Pullar, B. A. Smith, W. J. M. Woolley. (Applies in accordance with Sec. 1, Art. I, of the By Laws.)

1343

(11) CATES, WALTER HERBERT, 5137 Hermosa Ave., Los Angeles, Cal. (Age 25. Born Santa Monica, Cal.) 1924 B. S., Univ. of Cal. *TT 2: SP 2.* 1918 to 1920 (at times) Chainman for P. M. Lorraine, on survey work near Los Angeles. *TT 0.5: SP 0.5.* June to Sept. 1920 Chainman and Transitman for George Greenough, on surveys. June to Sept. 1921 Chainman, City of Los Angeles. May 1924 to Feb. 1925 Draftsman and Computer, San Joaquin River Water Storage Dist., estimated and computed earthwork, costs, etc. *TT 0.7: SP 0.7.* March 1925 to March 1926 Asst. Engr., La Puente Valley County Water Dist. and La Grande Source Water Co., on design and construction of municipal water system and irrigation project at Puente, Cal. *TT 1: P 1: RC 1: D 0.5.* March 1926 to date Hydr. and Sales Engr., Western Pipe and Steel Co. of California, designing and estimating pipe lines, tanks, structural steel buildings, etc. *TT 0.7: SP 0.7: D 0.5. TT 4.9: SP 3.9: P 1: RC 1: D 1.* Refers to H. Barnes, E. E. Blackie, R. E. Davis, H. D. Dewell, B. A. Etcheverry, C. G. Hyde, C. R. Sumner.

1344

(10) CHASE, ARTHUR SLOAN, Chapel Hill, N. C. (Age 27. Born Groveland, Mass.) 1924 B. S. in C. E., Univ. of N. C. *TT 2.* March 1919 to Sept. 1921 Rodman, Instrument and Chf. of Party on surveying, Inspector on reinforced concrete and structural steel building with H. F. Bryant, Cons. Engr., Brookline, Mass. *TT 2.5.* Summer 1922 Chf. of Party on subdivision layout with G. M. Braune and H. F. Janda, Chapel Hill, N. C. June 1924 to Feb. 1925 Field Engr. on water-works construction with W. C. Olsen, Raleigh, N. C. *TT 0.7.* March 1925 to April 1926 Asst. Engr. on municipal improvements, J. B. McCrary Eng. Corporation, Atlanta, Ga. *TT 1: RC 0.3.* April to Sept. 1926 Roadway Inspector on concrete paving, North Carolina Highway Comm. *TT 0.4. TT 6.6: RC 0.3.* Refers to T. C. Atwood, G. M. Braune, W. Cain, T. F. Hickerson, H. F. Janda, T. S. Johnson, H. E. Miller, T. Saville, F. E. Schnepe.

1345

(1) CONRAD, JOHN JOSEPH, 28 Montgomery Pl., Brooklyn, N. Y. (Age 30. Born Andeer, Switzerland.) 1922 C. E., Swiss Pol. Univ., Zurich, Switzerland. *TT 2: SP 2.* Jan. to Aug. 1922 Asst. Engr. to Supt., Simonett & Co., Constrs., Klosters, Switzerland, on construction of 10-km. tunnel for hydro-electric development, rock excavation, reinforced concrete and gunite tunnel lining. *TT 0.6: P 0.6: RC 0.6.* Aug. 1922 to Aug. 1923 Civ. Engr., A. Conrad Lumber Works, Andeer, Switzerland, on design, construction and operation of cable-

ways for lumber transportation. *TT 0.9: P 0.9: RC 0.9.* Sept. 1923 to Feb. 1924 Draftsman, North Carolina State Highway Comm., Raleigh, N. C., on design and detail of reinforced concrete highway bridges. *TT 0.4: P 0.4.* Feb. 1924 to Aug. 1925 Structural and Hydr. Designer, Southern Power Co., Charlotte, N. C., on hydro-electric developments and steam stations; design, layouts and details for Isle Maligne, Rodhiss, Tiger Stream, New Catawba, construction of plants and highway bridges. *TT 1.5: P 1.5: RC 0.8: D 0.7.* Aug. 1925 to Jan. 1926 Hydr. Designer, Elec. Bond & Share Co., New York City, on design and detail for stations at Victoria and Norwood. *TT 0.4: P 0.4: D 0.4.* Jan. to May 1926 Reinforced Concrete Designer, Anglo Chilean Consolidated Nitrate Corporation, New York City, on nitrate plant at Coyd Norte. *TT 0.3: P 0.3.* March 1926 to date Reinforced Concrete and Structural Steel Designer and Detailer for railroad and highway bridges, Office of Engr. of Structures, New York Central R. R. Co. *TT 0.5: P 0.5.* *TT 6.6: SP 2: P 4.6: RC 2.3: D 1.1.* Refers to A. C. Lee, W. S. Lee, Z. H. Sikes, H. H. Steinhäuser, H. T. Welty.

1346

(1) **DARLING, JAMES ARTHUR**, 173 Vassar Ave., Newark, N. J. (Age 25. Born Berkshire, N. Y.) Student, Civ. Eng. course, Newark Technical Evening School. April 1924 to Aug. 1926 with New Jersey State Highway Dept., until Feb. 1925 as Rodman, then Jun. Engr., on level and transit work, surveys, maps and computations, drafting, giving line and grade for construction; at times Acting Party Chf. *TT 2.4: SP 2.4.* Aug. 1926 to date Draftsman, The Port of New York Authority, drafting designs, maps, stress sheets, etc. for proposed Hudson River suspension bridge from Fort Washington, N. Y. to Fort Lee, N. J. *TT 0.2: SP 0.2.* *TT 2.6: SP 2.6.* Refers to A. P. Andersen, L. E. Andrews, W. A. Cuenot, H. W. Hellmann, F. W. Tooker.

1347

(15) **de la FUENTE, JESUS**, Ave. Juarez 609, Torreon, Coahuila, Mexico. (Age 49. Born Nadadores, Coahuila, Mex.) 1900 M. E., Columbia Univ., New York City. *TT 2: SP 2.* Sept. to Dec. 1900 land levelling, surveying, etc. in Nadadores and vicinity. *TT 0.2: P 0.2.* Oct. 1901 to May 1902 Asst. Engr., Mexican Coal & Coke Co., mine survey, etc. *TT 0.5: SP 0.5.* June to July 1902 survey of approx. 40 000 acres, near Mexican Coal & Coke Co. for Antonio del Fuente. *TT 0.1: P 0.1.* Aug. 1902 to July 1903 surveyed land, fixing monuments, lines, etc., of municipalities of Alleude, Rosales y Gígedo, for Governor of State of Coahuila. *TT 1: P 1: RC 0.5.* Aug. 1903 to Jan. 1905 'locating main' ditch (40 miles long) for getting springs and lost water out of Cienegas & San Marcos Valleys, Mondova Dist., Coahuila State, one month as Asst. Engr. then complete charge of locating and executing work. *TT 0.6: SP 0.1: P 0.5: RC 0.2.* 1904 to Nov. 1905 surveyed, put corners, lines, etc., and divided 920 000 acres into 21 lots. *TT 0.8: P 0.8: RC 0.3.* Dec. 1905 to July 1909 Asst. Mgr. and member of firm, Manuel de la Fuente & Co., exploited a large hacienda in agriculture, etc., built and located irrigating ditches (approx. \$150 000); 1906 projected large ditch, with desilting arrangements (cost about \$350 000) to deviate a torrential river (not executed). *TT 3.6: P 3.6: RC 2.3.* Feb. 1913 to date member of firm and Mgr., Manuel de la Fuente & Son, part owners of Hacienda Torreon y Anexas; built wells, planned and improved irrigation ditches (about \$75 000) (ditches and pumping costs, machinery, etc., \$1 000 000). Some consulting work. *TT 3.2: P 3.2: RC 1.3.* *TT 12: SP 2.6: P 9.4: RC 5.1.* Refers to R. A. Foster, R. Gayol, C. Lobo, M. Marroquin y Rivera, L. Perez Castro, H. W. Potter, V. Saucedo.

1348

(11) **DERBY, RAY LYLE**, 937 South Curson Ave., Los Angeles, Cal. (Age 28. Born Brooklyn, N. Y.) 1922 B. S., Coll. of Civ. Eng., Univ. of Cal. *TT 2: SP 2.* May to Aug. 1918 Chainman, Rodman and Inspector on concrete work in tunnels and on trestles for pipe lines, Marin Municipal Water Dist., San Rafael, Cal. May to Dec. 1919 Draftsman and Instrumentman, Los Angeles County Flood Control, Los Angeles, Cal., plotting and making surveys for topographical maps, etc. *TT 0.6: SP 0.6.* Jan. to June 1920 Instrumentman, Div. VII, California State Highway Comm., Los Angeles, on preliminary, location and construction work in Los Angeles and Imperial Counties. *TT 0.5: SP 0.5.* May 1922 to June 1923 Asst. Engr., California State Board of Health, Bureau of San. Eng., Berkeley, Cal., on inspection of, and making efficiency and sanitary chemical tests for, water supplies, sewage-treatment plants, swimming pools, etc.; writing reports, etc. *TT 1.1: SP 0.5: P 0.6: RC 0.2.* July 1923 to date San. Engr., Salisbury, Bradshaw & Taylor, Cons. Engrs., Los Angeles; designed sewage-treatment works for Lake Arrowhead, Cal.; designed 2 000 000-gal. activated sludge plant and had charge of water treatment and purification for Beverly Hills; at present designing 5 000 000-gal. rapid sand filtration plant for Beverly, including investigations for elimination of odor nuisance from water; in charge of design and construction of outfall sewers between Beverly Hills and Los Angeles, and of field and office work for construction

and excavation of roads, building sites, etc., in and around Los Angeles. *TT 3.3: SP 0.3: P 3: RC 2: D 1.5.* *TT 7.5: SP 3.9: P 3.6: RC 2.2: D 1.5.* Refers to C. Bradshaw, C. Derleth, Jr., C. G. Gillespie, R. F. Goudey, C. G. Hyde, A. J. Salisbury, Jr., A. Taylor.

1349

(4) **DONOVAN, GREENSBURY WILLIAM, Jr.**, 6209 Marsden St., Philadelphia, Pa. (Age 23. Born Philadelphia, Pa.) 1925 B. S. in C. E., Univ. of Pa. *TT 2: SP 2.* July 1925 to June 1926 Structural Detailer, Trenton Plant, Am. Bridge Co., on steel work for office and mill buildings, bridges, etc., also making erection plans. *TT 1: SP 1.* June 1926 to date Structural Detailer, Baldwin Locomotive Works, Philadelphia, making preliminary drawings, estimating costs and on design of buildings. *TT 0.4: SP 0.4.* *TT 3.4: SP 3.4.* Refers to C. C. Bailey, H. C. Berry, W. H. Chorlton, E. T. Grandlienard, E. L. Ingram, W. S. Pardoe, F. P. Witmer.

1350

(6) **DUNCAN, VANCE LeROY**, 184 Sixth St., Ambridge, Pa. (Age 22. Born Los Angeles, Cal.) 1926 B. C. E., Ohio State Univ. *TT 2: SP 2.* June to Sept. 1923 Machinist's Helper, Columbus Union Oil Cloth Co., repairing and constructing machinery. June to July 1924 with R. C. Sloane as Levelman, Chainman, Draftsman and Calculator on 24-mile road survey. July to Sept. 1924 with U. S. Geological Survey, Dept. of Water Resources, construction of gaging stations for river flow, installing recording devices. June to Sept. 1925 Highway Inspector, State of Pennsylvania. June 1926 to date Detailer, American Bridge Co., on bridges, mill and office buildings, pipe line supports, viaducts. *TT 0.4: SP 0.4.* *TT 2.4: SP 2.4.* Refers to L. Lee, C. T. Morris, J. C. Prior, J. R. Shank, R. C. Sloane.

1351

(3) **FENN, NATHAN FREDERICK, Jr.**, 760 Madison Ave., Albany, N. Y. (Age 24. Born Waterbury, Conn.) 1924 C. E., Rens. Pol. Inst. *TT 2: SP 2.* June 1924 to date Engr., State Dept. of Architecture, Albany, N. Y., on drafting, surveying and design and (past year) on special field work, making estimates, reports, etc. *TT 2.5: SP 2.5.* *TT 4.5: SP 4.5.* Refers to E. R. Cary, R. C. Taggart.

1352

(1) **FINNERTY, RAYMOND GERARD**, 427 Nostrand Ave., Brooklyn, N. Y. (Age 32. Born New York City.) Sept. 1913 to Jan. 1916 and Sept. 1916 to March 1917 student, Kansas Univ. *TT 1: SP 1.* Summers 1914 and 1915 tracing and detailing steel mill buildings, Kansas City Structural Steel Co. June to Oct. 1916 Draftsman on bridge work, with Harrington, Howard & Ash, Kansas City, Mo. *TT 0.5.* May 1917 to Dec. 1918 2d Lieut., Aviation, U. S. Army. Dec. 1918 to Jan. 1921 Checker with George A. Just (6 months), and National Bridge Co. (1 year), checking shop details for building work and with Gunvald Aus Co. (6 months) checking and designing steel office buildings. *TT 2: RC 1.5: D 0.4.* Jan. 1921 to date with J. A. L. Waddell, Cons. Engr., New York City, as Asst. Engr. designing and detailing steel bridges, 1½ years Res. Engr. on Olden Ave. Bridge, Trenton, N. J. *TT 5.7: RC 4: D 3.5.* *TT 9.2: RC 5.5: D 3.9.* Refers to T. E. Brown, Jr., F. DeSchauensee, S. Hardesty, T. C. Shedd, J. A. L. Waddell, W. G. Williams.

1353

(11) **FISHER, HERBERT PHILLIPS**, 3019 Thirtieth St., San Diego, Cal. (Age 22. Born Chicago, Ill.) Oct. 1922 to Oct. 1924 Machinist-Mechanic, U. S. G. & E. Co., Placerville, Cal., design and construction of tools and special equipment for Constr. Dept. on El Dorado Hydro-Elec. Development, also erection of machine shop, etc.; Rodman. *TT 2: SP 2.* Oct. 1925 to date Draftsman, San Diego Consolidated Gas & Elec. Co., on estimating, designing and sketching and instrument work. *TT 1: SP 1.* *TT 3: SP 3.* Refers to G. E. Loughland, A. Meyer, W. B. Rittenhouse, F. C. Shenehon, E. D. Uhlenendorf, W. T. Walker, J. V. Zahlen.

1354

(10) **FRIEDMAN, EDMUND**, City Hall, Coral Gables, Fla. (Age 29. Born Nashville, Tenn.) Licensed Engr., State of Florida. 1918 B. E., Vanderbilt Univ. *TT 2: SP 2.* June to Oct. 1917 Instrumentman on government lock and dam construction at Lock E, Cumberland River. June to Oct. 1918 Instrumentman, Nashville, Chattanooga & St. Louis R. R. *TT 0.3: SP 0.3.* Oct. 1918 to May 1919 with Artillery, U. S. Army. May 1919 to Oct. 1920 in charge of highway location and surveys in Arkansas and Tennessee; located roads (approx. 100 miles), plans for highways, designing water-works plant and distribution line, filter plant; Res. Engr. on construction of filter plant, water-works system, etc., at Pulaski, Tenn. *TT 1.5: P 1.5: RC 1.2: D 0.3.* June 1921 to Feb. 1922 Asst. City Engr., Jackson, Miss., in charge of assessments, paving, etc., design of addition to filter plant. *TT 0.7: P 0.7: RC 0.4: D 0.3.* Feb. 1922 to Dec. 1924 Res. Engr., on sewer and water, Durant, Miss., sewer and reservoir, Brookhaven, Miss. and paving, water-works and sea wall, Biloxi, Miss.; design of water-works system, including filter plant and pumping station, Houma, La. *TT 1.9:*

P 1.9: RC 1.5: D 0.5. Jan. to June 1925 Asst. City Engr., Jackson, in charge of engineering. TT 0.5: P 0.5: RC 0.5. June 1925 to date Asst. City Mgr. (6 months), and at present Engr. for Coral Gables Corporation on \$2 000 000 dredging, lake, sidewalk and paving development, and City Engr. on \$1 800 000 paving program and \$200 000 storm sewer system, Coral Gables, Fla.; office is designing sanitary sewer system for City (estimated cost \$1 500 000). TT 1.5: P 1.5: RC 1.5. TT 8.5: SP 2.3: P 6.2: RC 5.2: D 1.1. Refers to A. S. Craven, M. L. Culley, M. B. Garriss, B. H. Klyce, A. C. Knight, R. W. Wardwell.

1355

(7) GALBREATH, ROBERT ADAM, 1318 Wildwood Ave., Jackson, Mich. (Age 30. Born Ashmore, Ill.) 1923 B. S., Univ. of Ill. TT 2: SP 2. April 1918 to March 1919 with U. S. Army, as 2d Lt., C. A. C., Orienteur Officer, Saumur (France) Artillery School, and Heavy Artillery School, Angers, France; Instructor, O. & T. C. No. 4, Angers; Battery Officer, 71st Artillery, C. A. C. TT 1: SP 0.4: P 0.6. June 1923 to April 1925 with Illinois Elec. Power Co., until May 1924 as Inspector, on new steam power plant, layout of foundations, etc., then Civ. Engr., on layout of building, in charge of inspectors and erection of equipment. TT 1.9: P 1.9: RC 1. April 1925 to date with Commonwealth Power Corporation, until Dec. 1925 as Draftsman on design of concrete and steel structures, and since then Res. Engr., checking construction estimates and architects' certificates. TT 1.6: P 1.6: RC 0.9: D 0.7. TT 6.5: SP 2.4: P 4.1: RC 1.9: D 0.7. Refers to E. M. Burd, F. B. Kiel, E. Maerker, N. Van Eenam, P. A. Vickers, E. G. Willemin.

1356

(1) GENTZLINGER, HENRY WERNER, 884 West End Ave., New York City. (Age 25. Born New York City.) 1923 C. E., Lehigh Univ. TT 2: SP 2. Jan. 1917 to Aug. 1919 (vacations and spare time prior to college course) Draftsman, Connelly Iron Sponge & Governor Co., Long Island City, N. Y. March 1924 to March 1925 with Witherup Cork Packing Co., Inc., introducing and marketing new packing for pumps and valves. July 1923 to Feb. 1924 and March 1925 to date Engr., Refining Dept., The Texas Co., until Feb. 1924 at Port Arthur, Tex. on mechanical engineering and since then at New York City designing and estimating, past 8 months in responsible charge. TT 2.4: P 2.4: RC 0.7: D 0.8. TT 4.4: SP 2: P 2.4: RC 0.7: D 0.8. Refers to P. Beall, J. B. Callanan, R. J. Fogg, M. O. Fuller, H. G. Payrow, W. L. Wilson.

1357

(8) GLASSMAN, MORRIS, 728 South Western Ave., Chicago, Ill. (Age 24. Born Chicago, Ill.) 1923 B. S., Univ. of Ill. TT 2: SP 2. June to Sept. 1922 Timekeeper and Asst. to Supt. on construction, Subway Eng. Co., Chicago, Ill. June 1923 to date with Kelker, DeLeuw & Co., Chicago, until Dec. 1923 in responsible charge of construction of levee, interior drainage ditches and concrete cut-off wall, Keach Drainage and Levee Dist., Carrollton, Ill.; Dec. 1923 to June 1925 on design of plans and details of concrete pavements, sewers and water mains for small municipalities, detailing sewage-treatment plants for Taylorville and Libertyville, Ill., and drafting; since June 1925 writing resolutions and ordinances for paving, sidewalks, sewers and water mains, etc.; design and detail drawings of sewage-treatment plants for Mundelein (\$143 000) and Breese, Ill.; plans and estimates on rapid transit plans for City of Chicago. TT 3.2: P 3.2: RC 2.5: D 1.7. TT 5.2: SP 2: P 3.2: RC 2.5: D 1.7. Refers to E. A. Clark, H. Cross, C. E. DeLeuw, R. F. Kelker, Jr., M. S. Ketchum, G. W. Pickels, C. C. Williams.

1358

(6) GOLD, FRED WHAN, 344 McKinley Ave., Bellevue Branch P. O., Pittsburgh, Pa. (Age 25. Born New Brighton, Pa.) 1925 B. S. in Civ. Eng. Pa. State Coll. TT 2: SP 2. June 1925 to May May 1926 Draftsman, and May 1926 to date Field Engr., Erection Dept., American Bridge Co., Pittsburgh, Pa. TT 1.4: SP 1.4. TT 3.4: SP 3.4. Refers to J. L. deVou, C. W. Doerr, F. W. Henriel, J. C. Jordan, E. D. Walker.

1359

(4) GOLDSPINNER, WILLIAM, 333 League St., Philadelphia, Pa. (Age 26. Born Philadelphia, Pa.) 1925 B. S. in C. E., Pa. State Coll. TT 2: SP 2. June 1919 to Jan. 1920 Draftsman, Baldwin Locomotive Works, detailing and tracing locomotive parts. TT 0.7: SP 0.7. Feb. to Aug. 1920 Draftsman, Stone & Webster, Inc., detailing and tracing mechanical and structural parts of power plants. TT 0.6: SP 0.6. July 1925 to Feb. 1926 Structural Draftsman, Board of Transportation, New York City, on design of subway structure. TT 0.7: P 0.7: D 0.7. July 1922 to Sept. 1923 Instrumentman, and June to Sept. 1924 and March 1926 to date Chf. of Party, Pennsylvania State Highway Dept., on surveys. TT 1.9: SP 1.2: P 0.7: RC 0.7. TT 5.9: SP 4.5: P 1.4: RC 0.7: D 0.7. Refers to J. Feld, H. G. Harper, A. I. Raisman, R. L. Sackett, E. D. Walker.

1360

(1) **GRAY, RALPH**, Wanaque, N. J. (Age 30. Born Maine, N. Y.) 1921 C. E., Cornell Univ. TT 2: SP 2. June to Dec. 1921 Jun. Asst. Engr., New York State Highway Dept., Binghamton, N. Y., line, grade and inspection on 7 miles of highway. TT 0.4: SP 0.4. Dec. 1921 to date with North Jersey Dist. Water Supply Comm., about 9 months as Computer, then Asst. Engr.; about 1½ years on design of gate houses, aqueducts, etc., railroad and highway relocation, aqueduct and dyke location; 1½ years Chf. Inspector, under Senior Asst. Engr. in charge of Great Notch Tunnel; on line and grade for concreting, checking forms and inspecting concrete; about 3 months in charge, under Senior Asst. Engr. on contract of five dykes and Wanaque Tunnel; on line and grade for forms on corewall and gravity dams and for driving tunnel, and preparing estimates; past 1 1/10 years acted as Section Engr. reporting to Div. Engr., supervising office and field work of all structures on 7 miles of Erie R. R. relocation. TT 4.8: P 4.8: RC 2.5. TT 7.2: SP 2: P 5.2: RC 2.5. Refers to C. J. Craigmile, L. G. Cutler, S. M. Ellsworth, S. Gordon, N. C. Holdredge, A. H. Pratt, F. C. Sellnow, A. L. Sherman, J. A. Ward.

1361

(1) **GRIESEL, HEINRICH**, 75 West St. New York City. (Age 43. Born Wagenfurth, Germany.) 1918 Diplom. Ing. and D. of Eng., Technische Hochschule, Berlin, Germany. Regierungsbaumeister, Prussian and Germany Govts. TT 2: SP 2. 1902 to 1906 Engr., Prussian Govt. R. Rs., and German Navy. TT 4: SP 2: P 2: RC 2: D 2. 1907 to 1911 Chf. Engr. in charge of construction of railroads and railroad yards in Germany; H. Vatter, Mannheim, Walford, Germany. TT 4: P 4: RC 4: D 4. 1912 to 1915 Chf. Engr. in charge of construction of water-filtration water-supply and sewage-disposal plants for cities in Germany; Boswell-Prietsch. TT 3: P 3: RC 3. 1915 to 1918 with German Army. 1919 to 1925 Designing Engr., with German Govt. R. Rs. (4 years) and Siemens-Bauunion, Contrs., Berlin, Germany (2 years). TT 6: P 6: RC 6. 1925 to date Cons. Engr. in United States for Gelsenkirchener (Bergwerk A. G.) Mining Co., Inc., Gelsenkirchen and with Siemens-Bauunion, Contrs., Berlin; associated with Charles F. Rand, New York City. TT 1.5: P 1.5. TT 20.5: SP 4: P 16.5: RC 15: D 6. Refers to A. D. Fliinn, K. Imhoff, J. S. Langthorn, R. Ridgway, O. S. Schlich, O. Singstad, R. von Fabrice.

1362

(1) **GUARDIA, ERNESTO JAEN**, Care, Apartado 851, Panama, Republic of Panama. (Age 30. Born Anton, Cocle, Panama.) 1921 B. S. in Arch. Eng., Univ. of Ill. TT 2: SP 2. March 1914 to April 1915 Draftsman, Office of Public Works, Panama National Govt. TT 1.1: SP 1.1. Feb. to April 1920 Draftsman, Leonard Eng. Co., Chicago, Ill., architectural and structural steel drafting and tracing. TT 0.2: SP 0.2. April to Dec. 1920 Reinforced Concrete Detailer, Kalman Steel Co., Chicago, Ill., preparing working drawings and bar lists from architectural plans and specifications, some designing and estimating on reinforced concrete structures. TT 0.7: SP 0.7. Nov. 1921 to Jan. 1922 Draftsman with J. W. Royer, Archt., Urbana, Ill., designing, drafting and detailing reinforced concrete buildings. TT 0.2: SP 0.2. Jan. 1922 to July 1923 Designer, Estimator, Head Checker and Acting Asst. Engr., Kalman Steel Co., designing and estimating reinforced concrete structures, supervising detailers and checkers. TT 1.6: P 1.6: RC 1.6: D 0.8. July 1923 to Jan. 1924 Designer and Estimator, Southern Eng. Co., Charlotte, N. C., designing and estimating reinforced concrete structures, making office standards, such as tables for reinforced concrete designing, etc. TT 0.5: P 0.5: RC 0.5: D 0.4. Jan. to Aug. 1924 Designer and Estimator, Building Products Co., Toledo, Ohio, designing and estimating reinforced concrete structures, estimating steel form work. TT 0.5: P 0.5: RC 0.5: D 0.3. Sept. 1924 to Aug. 1925 Bridge Engr., Central Road Board, Panama City, designing reinforced concrete culverts, bridges and abutments, supervising bridge construction, estimating culverts and bridges. TT 1: P 1: RC 1: D 0.8. Aug. 1925 to date member of firm, Wright, Haw y Jaen Guardia, Ltd., Panama, designing, estimating and supervising construction of buildings. TT 1.2: P 1.2: RC 1.2: D 0.8. TT 9: SP 4.2: P 4.8: RC 4.8: D 3.1. Refers to T. Guardia, R. C. Hardman, I. Hausman, E. P. Haw, H. H. Jordan, R. C. Reese, R. K. West.

1363

(1) **HARPER, WALTER NICHOLS**, 6201 Broadway, New York City. (Age 32. Born Troy, N. Y.) Sept. 1913 to Dec. 1915 and Sept. 1916 to June 1917 student in Civ. Eng., Rensselaer Polytechnic Inst. TT 1: SP 1. June 1917 to date (except July 1918 to July 1919 Private and Sergeant with U. S. Army in U. S. and France) with U. S. Engr. Dept., Albany, and First Dist., New York City, until Nov. 1923 as Inspector, then Jun. Engr. (Civ.) on dredging and rock removal and on survey work, acting as Asst. Chf. of Party with duties of Transitman, Leveler, Computer, Draftsman and Recorder, and (after Sept. 1919) supervising inspection of removal of sunken vessels, inspection, investigations and reports on construction under War Dept. permits, preparing specifications, estimates and permits,

technical investigations and reports; since Oct. 1926 Prin. Asst. to Engr. in charge of Planning Sec., preparation of technical investigations and reports on river and harbor improvements, etc. TT 8: SP 0.9: P 7.1: RC 2.9. TT 9: SP 1.9: P 7.1: RC 2.9. Refers to J. M. Buckley, E. Burr, P. J. Gray, W. L. Kuehnle, J. H. Rostock, J. R. Slattery, E. B. Snell, J. R. Spelman.

1364

(12) HART, PHILIP, Care, Pacific Bridge Co., Portland, Ore. (Age 39. Born Portland, Ore.) 1910 B. S., Mass. Inst. Tech. TT 2: SP 2. Prior to 1915 (approx. 4 years) Timekeeper and Engr. with various construction firms. TT 4: SP 4. Aug. 1915 to date (except during war, with U. S. Engrs. Corps) with Pacific Bridge Co., as follows: Aug. 1915 to Nov. 1917 Asst. Engr. on pavement (ten miles) of Columbia River Highway, and constructing piers for Interstate Bridge across Columbia River at Vancouver, Wash.; Nov. 1917 to Aug. 1919 Engr. and since Aug. 1919 member of firm and Treasurer; company constructed asphaltic and concrete pavement (50 miles), several large grading contracts, Kelso, Lewis and Clarke, Burnside, Ross Island and Longview bridges; has been in responsible charge of all work, reporting to Pres. of Company. TT 11: P 11: RC 9: D 7. TT 17: SP 6: P 11: RC 9: D 7. Refers to R. D. Hoyt, E. B. MacNaughton, R. E. Mieth, B. S. Morrow, J. H. Polhemus.

1365

(2) HAYES, HENRY HOWE, 103 Center St., Brookline, Mass. (Age 21. Born Silver City, New Mex.) 1926 B. S. in C. E., Va. Mil. Inst. TT 2: SP 2. June to Oct. 1926 Student Engr., Aberthaw Co., Boston, Mass., acting as Rodman and Instrumentman, also on field office engineering. TT 0.3: SP 0.3. Oct. 1926 to date Draftsman, Stone & Webster, Inc., Boston. TT 0.1: SP 0.1. TT 2.4: SP 2.4. Refers to J. A. Anderson, E. C. Dunn.

1366

(1) HOROWITZ, LOUIS GEORGE, 102 Palmer St., Passaic, N. J. (Age 27. Born Passaic, N. J.) 1919 U. S. Mil. Acad., West Point, N. Y. 1921 B. S., Mass. Inst. Tech. TT 2: SP 2. April to June 1920 Aerial Photographer, Air Service, U. S. Army, Station Ajo, Arizona, Oct. 1921 to Nov. 1922 Asst. Personnel Officer, Office of Chf. of Engrs., U. S. Army. TT 1: P 1. Dec. 1922 to March 1923 with J. C. Stewart Constr. Co., Gen. Contrs., as Erection Engr. on Hospital for Insane, Creedmore, L. I. TT 0.3: P 0.3. April to Nov. 1923 with E. E. Lignante, New York City, as Asst. Supt. of building construction, supervising construction of apartment houses. TT 0.6: P 0.6: RC 0.3. Jan. 1924 to July 1926 Pres., L. George Horowitz Constr. Co., Passaic, N. J., on construction work (\$1 000 000). TT 2.5: P 2.5: RC 2.5: D 0.3. TT 6.4: SP 2: P 4.4: RC 2.8: D 0.3. Refers to L. H. Beach, G. L. Hosmer, E. F. Miller, G. E. Russell, C. M. Spofford, H. Taylor, G. A. Youngberg.

1367

(10) HURD, HAROLD WALLER, Box 531, St. Augustine, Fla. (Age 28. Born Paris, Mo.) 1921 B. S. in M. E., Mo. School of Mines. TT 2: SP 2. June to Aug. 1917 and Feb. 1921 to Aug. 1925 Junior Highway Engr., Illinois State Highway Dept., until Aug. 1917 Inspector on concrete paving, from Feb. to Oct. 1921 drafting, estimate checking, etc., and after Oct. 1921 drafting, culvert design, estimating, instrument work, etc., inspection on paving, bridges and grading; Res. Engr. on grading, culverts and bridges. TT 4.5: SP 1.5: P 3: RC 2. Jan. 1919 to Jan. 1920 Asst. County Engr., Monroe County, Mo., acting as Transitman and Draftsman on location of Federal Aid Roads. TT 1: SP 1. Aug. 1925 to date with Florida State Road Dept., until Dec. 1925 as Draftsman, and since then Project Engr. in charge of 2 grading and 2 bridge projects; also inspections on one project. TT 1: SP 0.2: P 0.8: RC 0.8. TT 8.6: SP 4.8: P 3.8: RC 2.8. Refers to R. R. Benedict, G. F. Burch, E. R. Epperson, E. G. Harris, F. T. Sheets.

1368

(6) JAMESON, WILLIAM HOWE, 42 Waldorf St., Observatory Station, Pittsburgh, Pa. (Age 24. Born Philadelphia, Pa.) 1922 A. B., 1925 A. M. and B. S. in C. E., Univ. of Pa. TT 2: SP 2. June to Sept. 1923 Rodman, Philadelphia and Reading R. R. June to Sept. 1924 and July 1925 to June 1926 Draftsman, detailing steel structures, Pottstown. June to Oct. 1926 Templet Maker and Shop Inspector, Pottstown, and Oct. 1926 to date Estimator, Eng. Dept., Pittsburgh, all for McClintic Marshall Co. TT 1.4: SP 1.4: P 0.2. TT 3.4: SP 3.2: P 0.2. Refers to W. H. Chorlton, D. S. Gendell, Jr., R. A. Pendergrass, G. L. Taylor, F. P. Witmer.

1369

(15) JARBOE, JAMES ALOYSIUS, 513 South Dougherty, Eastland, Tex. (Age 22. Born Parsons, Kans.) 1926 B. S. in C. E., Univ. of Kans. TT 2: SP 2. Commissioned 2d Lieut., Engr. Reserve Corps, U. S. Army. July 1926 to date Draftsman, Eng. Dept., Prairie Pipe Line Co., Eastland, Tex. TT 0.3: SP 0.3. TT 2.3: SP 2.3. Refers to E. Boyce, H. A. Rice, F. A. Russell.

1370

(11) JENSON, JOSEPH RICHARD, 362 Downingtown Ave., Salt Lake City, Utah. (Age 29. Born Logan, Utah.) 2 years student, Univ. of Utah. TT 0.6: SP 0.6. Jan. to June 1920 Chairman and Rodman, Utah-Idaho Sugar Co. TT 0.5: SP 0.5. June 1920 to March 1923 Instrumentman, Inspector and Draftsman, and April to June 1924 Inspector, Utah State Road Comm., on highway location and construction. TT 3: SP 3. March to July 1923 Instrumentman, and July to Aug. 1925 Time and Extra Force Keeper on construction, Southern Pacific Co. TT 0.4: SP 0.4. July to Oct. 1923 Transitman, and June 1924 to June 1925 Instrumentman, Oregon Short Line R. R., at times (during latter period) performed some of duties of Res. Engr., including engineering work on construction of eight pile bridges and location and construction of twenty river channel changes with rip-rap construction; made changes in alignment and grade, etc. TT 1.3: SP 0.3: P 1: RC 1. June to July 1925 Draftsman, Oregon Trunk R. R. TT 0.1: SP 0.1. Aug. 1925 to Sept. 1926 Instrumentman, H. M. Byllesby & Co., on hydro-electric surveys and in office on valuation of Market St. Ry. TT 1.1: SP 1.1. TT 7: SP 6: P 1: RC 1. Refers to E. S. Borgquist, W. D. Chamberlin, F. Coffman, O. St. C. Struthers, K. C. Wright.

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(8) JERZ, WALTER JOHN, 502 South Glenwood Ave., Springfield, Ill. (Age 29. Born Ware, Mass.) 1921 B. S. in Civ. Eng., Norwich Univ. 1926 M. S. E., Univ. of Mich. TT 2: SP 2. Summers 1916-1921 Rodman, Axeman, Surveyor, etc., on paving, sewers, drainage and surveys. Sept. 1921 to Dec. 1925 Inspector and Res. Engr., Illinois Div. of Highways, on construction, design, surveys and general office work. TT 4.2: P 4.2: RC 3: D 1.2. Dec. 1925 to June 1926 Graduate Student in Highway Eng. and Highway Transport, Univ. of Michigan. TT 0.6: P 0.6. July 1926 to date Office Engr. and some field supervision, Hurdon Constr. Co., Springfield. TT 0.3: P 0.3. TT 7.1: SP 2: P 5.1: RC 3: D 1.2. Refers to A. H. Blanchard, R. L. Morrison, H. E. Riggs, F. T. Sheets, R. S. Swinton, A. E. Winslow.

1372

(1) JOHNSON, ELLSWORTH, 230 West 107th St., New York City. (Age 26. Born Fulda, Minn.) 1922 B. S. in Civ. Eng., Univ. of Minn. TT 2: SP 2. April to Sept. 1920 Rodman, Chicago, Milwaukee & St. Paul R. R. TT 0.4: SP 0.4. April 1922 to Jan. 1923 with Gilbert C. Staehle, Chicago, Ill., on design and detail of reinforced concrete and structural steel. TT 0.7: P 0.7: D 0.7. April-Aug. 1923 Instrumentman with D. C. Fenstermaker, Casper, Wyo., on railroad construction. TT 0.4: P 0.4. Sept. 1923 to April 1924 Asst. Engr. on irrigation and drainage work in Palo Verde Irrigation Dist., Blythe, Cal., under Daniel W. Murphy and Fred F. Friend. TT 0.6: P 0.6. April to Aug. 1924 Estimator on gunite work, Los Angeles (Cal.) Cement Gun Co. TT 0.3: SP 0.3. Oct. 1924 to April 1925 Draftsman, American Holst & Derrick Co., St. Paul, Minn. TT 0.5: P 0.5: RC 0.2. April to Dec. 1925 Engr., Johnson, Drake & Paper, Inc., Minneapolis, Minn., on road construction. TT 0.7: P 0.7: RC 0.7. Feb. to Oct. 1926 Chf. Draftsman, Sewer Dept., and on boardwalk for City of Miami Beach, Fla. TT 0.7: P 0.7: RC 0.7: D 0.4. TT 6.3: SP 2.7: P 3.6: RC 1.4: D 1.4. Refers to F. Bass, A. S. Cutler, A. Daniels, F. F. Friend, J. C. Hain, A. F. Johnson, D. W. Murphy, G. C. Staehle, T. E. Winn, Jr.

1373

(1) KAMINSKY, CONSTANTIN DENIS, 466 Lexington Ave., New York City. (Age 37. Born Bialostock, Russia.) 1917 C. E., Imperial Inst. of Civ. Engrs., Petrograd, Russia. TT 2: SP 2. May to June 1912 Levelman, Kharkoff-Kherson R. R., Russia. TT 0.1: SP 0.1. June to Sept. 1912 Transitman, Bessarabia Highway Comm., Russia. TT 0.3: SP 0.3. May to Sept. 1913 Transitman, and May to Sept. 1914 Chf., Surveying Party, Tomsk Highway Comm., Russia. May to Sept. 1915 Asst. to Locating Engr., Troitz (Russia) R. R. Co., Verhneursalsk-Sterlitamak Line. April 1917 to May 1918 Designing Engr. and May 1918 to Feb. 1920 Res. Engr., Bridge Dept., Bessarabia R. R. Co., Odessa, Russia. TT 2.9: P 2.9: RC 1.8: D 1.1. April 1920 to Jan. 1921 County Engr., Vranja County Highway Comm., Yugoslavia. TT 0.8: P 0.8: RC 0.4: D 0.4. Jan. 1921 to April 1923 and June 1923 to May 1924 Locating Engr., Constr. Dept., Serbian State Rys., Belgrade, Yugoslavia. TT 3.2: P 3.2: RC 3.2. April to June 1923 Locating Engr., Ry. and Port Constr. Co., Belgrade. TT 0.2: P 0.2: D 0.2. June 1924 to Jan. 1926 Draftsman, Bridge Dept., Erie R. R. Co., New York City. TT 1.5: P 1.5. Jan. 1926 to date Engr. Draftsman, New York Central R. R. Co., Westside Improvements Dept. TT 0.8: P 0.8. TT 11.8: SP 2.4: P 9.4: RC 5.4: D 1.7. Refers to N. A. Alexieff, S. P. Maximoff, K. P. Melloransky, W. B. Poland, A. C. Welser.

1374

(12) KENNEDY, ARTHUR ROSS, Pierce, Idaho. (Age 39. Born Rawlins, Wyo.) 1920 B. S. C. E., State Coll. of Wash. TT 2: SP 2. October 1909 to Nov. 1910 Rodman and Chainman, U. S. Reclamation Service. TT 1.2: SP 1.2. Jan. to Dec. 1911 Instrumentman

and Sidewalk Inspector, City of Pasco, Wash. *TT 0.9: SP 0.9.* Jan. 1912 to Dec. 1914 contracting, sewer work, sidewalks and foundations. *TT 2.9: P 2.9: RC 2.9.* Dec. 1914 to April 1916 Chairman and Rodman, Interstate Commerce Comm. *TT 1.3: SP 1.3.* April to Sept. 1916 Instrumentman, Sept. 1916 to Aug. 1918 Res. Engr., Draftsman and Acting Chf. Engr. at Jamaica, B. W. I., surveying, making farm maps, locating and building tram lines and small irrigation units, Jan. 1921 to Aug. 1922 Asst. Chf. Engr., at Tela, Honduras, in charge of field engineers, on railroad location, surveys, water systems and drainage, and June 1924 to June 1926 Irrig. and Drainage Engr. at Tela, located and installed concrete work on 5 000 acres, irrigation work and later laid out a large drainage unit, all for United Fruit Co.; since June 1926 on leave of absence; has located and at present on plans for construction of small hydro-electric plant. *TT 6.1: P 6.1. TT 14.4: SP 5.4: P 9: RC 2.9.* Refers to H. J. Dignum, P. H. Myers, A. Onderdonk, H. Parker, H. E. Phelps, O. L. Waller.

1375

(11) **KEPNER, DANA EWART**, 420 State Office Bldg., Denver, Colo. (Age 28. Born Denver, Colo.) 1921 B. S., Mass. Inst. Tech. *TT 2: SP 2.* Aug. to Sept. 1921 Asst. Engr., Massachusetts State Dept. of Public Health, on investigations of water supplies and trade waste nuisances. *TT 0.1.* Sept. 1921 to June 1922 Asst. in San. Eng., Harvard Univ. Eng. School. *TT 0.7: RC 0.7.* July 1922-June 1924 Asst. Engr., San Dist. of Chicago, on design and construction of sewage-treatment plants. *TT 2: RC 1: D 1.7.* July 1924 to date San. Engr., Colorado State Board of Health, supervision and advisory duties over water and sewerage works in Colorado, including investigations, reports, approval of plans, etc. *TT 2.3: RC 2.3. TT 7.2: RC 4.1: D 1.3.* Refers to L. B. Barker, B. Lowther, I. W. Mendelsohn, C. M. Spofford, L. C. Whittemore.

1376

(1) **KHOSLA, AJUDHIANATH**, Executive Engr., Marala Headworks, Sialkot Dist., Punjab, India. (Age 33. Born Jullundur, Punjab, India.) 1912 A. B., Punjab Univ. 1916 C. E., Thomason Civ. Eng. Coll., Roorkee, India. *TT 2: SP 2.* 1916 to date with Imperial (Indian) Service of Engrs., since 1917 as Officer, being Asst. Executive Engr. and Executive Engr.; has designed and executed important works. Oct. 1916 to June 1918 in charge of desert area surveys for Bhabua Dam Project, Irrigation Branch, Public Works Dept., Punjab, India. *TT 1.8: P 1.8.* July 1918 to March 1920 with Mesopotamia Expeditionary Force. *TT 1.8: P 1.8: RC 0.4: D 0.4.* March 1920 to March 1921 on investigation of weir sites for Sutlej Valley Project, Punjab Irrigation. *TT 1: P 1: RC 1: D 1.* March to Oct. 1921 Discharge Divisional Charge, organizing gauging of Punjab River. *TT 0.6: P 0.6: RC 0.6: D 0.6.* Nov. 1921 to April 1926 on construction of Suleimant Headworks of Sutlej Valley Project; designed and executed works (over \$700 000). *TT 4.5: P 4.5: RC 2.5: D 2.5.* April 1926 to date Executive Engr., Marala Headworks, Upper Chenab Canal. *TT 0.5: P 0.5: RC 0.5: D 0.5. TT 12.1: SP 2: P 10.1: RC 4.9: D 4.9.* (Applies in accordance with Sec. 1, Art. I, of the By-Laws.)

1377

(1) **KLINE, ZOLTAN**, 415 Lexington Ave., New York City. (Age 34. Born Breznobanya, Hungary.) 1910 B. S., Royal State Hungarian Coll. 1914 C. E., Royal Joseph Pol. Inst., Budapest, Hungary. *TT 2: SP 2.* 1914 to 1917 Asst. Field Engr., State Railroads of Hungary, superintending construction in Dalmatia, surveying and designing tunnels and short span bridges. *TT 3.2: P 3.2: RC 0.5: D 0.7.* 1917 to 1919 Lieut., Eng. Corps, Austro-Hungarian Army, being Surveyor in charge of party. *TT 2: P 2: RC 2.* 1920 to 1922 Eng. Draftsman with Clinton & Russell, Architects, New York City, and others. *TT 1.8: P 1.8.* 1923 to 1924 Structural Designer, Stone & Webster, Boston, Mass., on steel frames of mill buildings. *TT 0.9: P 0.9.* 1924 Checker, Elec. Bond & Share Co., New York City, checking gates and frames of office buildings and power plants. *TT 0.7: P 0.7: RC 0.7.* 1924 to 1925 Engr., Park Iron Works, New York City, in charge of designing, detailing and erecting steel frames of buildings. *TT 0.9: P 0.9: RC 0.9.* 1925 to date Cons. Engr. to Architects and Builders, New York City, designed or had charge of erecting 15-story office building, two garages, a theater, 22-story building and several non-fireproof apartment houses. *TT 1.5: P 1.5: RC 1.5. TT 13: SP 2: P 11: RC 5.6: D 0.7.* Refers to J. Feld, H. A. Gray, S. W. Mosher, L. R. Newhall, E. S. Parker, W. Wilson.

1378

(1) **KOZIERSKI, STANISLAS FELIX**, 143 Boulevard St. Germain, Paris, France (temporary address, Pennsylvania Hotel, New York City). (Age 46. Born Warsaw, Poland.) 1904 Engr. of Ways, Inst. of Ways of Communications, Petrograd, Russia. Oct. 1904 to March 1910 Designing and Estimating Engr. and later Res. Engr., Warsaw Municipal Bridge over Vistula River (steel arch, pneumatic foundations, reinforced concrete approach, steel viaduct, \$3 000 000). *TT 5.5: P 5.5: RC 2: D 3.5.* April 1910 to Oct. 1912 Res. Engr. at Movrom, Russia, in charge of construction of 2 200-ft. steel railway bridge (pneumatic foundations)

over Oka River, and of 16 miles of approaches, including several reinforced concrete bridges (\$1 000 000). *TT 2.5: P 2.5: RC 2.5.* Oct. 1912 to June 1913 Designing Engr., Vladicaucasus R. R. Co., Petrograd, on bridge over Don River at Rostoff, Russia, with lift span (designed by J. A. Waddell). *TT 0.7: P 0.7: D 0.7.* Aug. to Nov. 1913 Res. Engr. in charge of location of a railway and highway bridge over Dnieper River at Ekaterinoslaff, Russia. *TT 0.2: P 0.2: RC 0.2.* Nov. 1913 to March 1917 Chf. Asst. to Chf. Engr. and Chf. Draftsman (Chf. of Technical and Estimating Dept.) for railroad bridge over Volga River at Jimbirsli, Russia, with 10 miles of approaches, including new stations, water supply, etc. *TT 3.3: P 3.3: RC 3.3: D 3.3.* March 1917 to Sept. 1918 Chf. of Technical and Estimating Dept. of Armavir-Stavropol-Blagodarnoe and Stavropol-Divnoe R. R. built by Armavir Jouapse R. R. Co. (Caucasus-Russia) including steel and reinforced concrete bridges, stations, water supply, etc. (200 miles). *TT 1.5: P 1.5: RC 1.5: D 1.5.* Nov. 1918 to Dec. 1919 Chf. Asst. to Chf. Engr. of Maintenance and Bldgs. Dept. in special charge of all bridges of Govt. Polish Rys. at Warsaw. *TT 1.1: P 1.1: RC 1.1: D 1.1.* Sept. 1920 to Dec. 1925 Chf. Designing and Estimating Engr., and after Sept. 1924 also Managing Director, Brossard-Mopin, Cons. Engrs. and Gen. Contrs., Tientsin, China, on reinforced concrete buildings and steel and reinforced concrete bridges and foundations; designed bridge over Yellow River. At present on leave, investigating management and building of toll bridges. *TT 5.2: P 5.2: RC 5.2: D 4.* *TT 20.1: P 20.1: RC 15.9: D 14.1.* Refers to M. Sullivan, V. E. Timonoff, J. A. L. Waddell, G. S. Webster. (Applies in accordance with Sec. 1, Art. I, of the By-Laws.)

1379

(1) LEHNERT, DIEDRICH FREDERICK, 1727 East Twenty-third St., Brooklyn, N. Y. (Age 28. Born Brooklyn, N. Y.) 1923 C. E., Princeton Univ. *TT 2: SP 2.* June 1923 to Sept. 1925 Archt.'s Supt., McKenzie, Voorhees & Gmelin, New York City, on inspection. *TT 2.3: SP 2.3.* Oct. 1925 to date Bldr., until March 1926 constructed homes in St. Augustine, Fla., then sub-contracting in Tampa. *TT 1: SP 1.* *TT 5.3: SP 5.3.* Refers to R. A. Backus G. E. Beggs, F. H. Constant, E. A. MacMillan, S. F. Voorhees.

1380

(1) LENHARDTSON, EMILIO, Rio Bamba 1121. Buenos Aires, Argentine Republic. (Age 34. Born Buenos Aires, Argentine Republic.) 1922 C. E., Univ. of Buenos Aires. *TT 2: SP 2.* Aug. 1913-Dec. 1920 Technical Inspector, and Jan. 1921-Oct. 1922 Technical Adjutant, Obras Sanitarias de la Nacion (Sanitary National Works). *TT 9.2: SP 7.4: P 1.8.* Nov. 1922 to date Sec. Chf. Engr. Argentine States Ry., on construction of International Ry., Salta to Antofagasta. *TT 4.1: P 4.1: RC 4.1.* *TT 15.3: SP 9.4: P 5.9: RC 4.1.* Refers to A. Acevedo, J. H. Burgoyne. (Applies in accordance with Sec. 1, Art. I, of the By-Laws.)

1381

(1) LIPPMAN, MEYER ALVIN, 403 Logan St., Brooklyn, N. Y. (Age 30. Born Brooklyn, N. Y.) 1920 C. E., Pol. Inst. of Brooklyn. *TT 2: SP 2.* Sept. 1914 to Sept. 1916 Eng. Asst., Motive Power Dept., Long Island R. R. Co. *TT 2: SP 2.* Sept. 1920 to June 1922 Instructor in Civ. Eng. in charge of Highway Eng. course, Polytechnic Inst. of Brooklyn. June to Sept. 1921 Asst. Engr., New York State Highway Dept., in charge of construction at Amagansett, N. Y. *TT 1.8: P 1.8: RC 1.8.* Aug. 1922 to Sept. 1924 Sales Engr. and supervised construction, Kalman Floor Co. *TT 2.1: SP 1.1: P 1: RC 1.* Sept. 1924 to date Engr., Kyrock Corporation of New York, in responsible charge of construction of rock asphalt pavements in New York, Connecticut and Rhode Island. *TT 2.2: P 2.2: RC 2.2.* *TT 10.1: SP 5.1: P 5: RC 5.* Refers to W. A. Brownfield, H. P. Hammond, C. Hudson, L. F. Peck, G. A. Schaefer, E. J. Squire, W. M. Wiesenber.

1382

(5) LUKENS, RICHARD RUSSELL, Care, Coast & Geodetic Survey, Washington, D. C. (Age 40. Born Roann, Ind.) 1908 B. S. in C. E., Purdue Univ. *TT 2: SP 2.* May to July 1906 Chainman, Illinois Central R. R. May to Sept. 1907 Levelman, U. S. Steel Corporation. July 1908 to date with U. S. Coast & Geodetic Survey, Washington, D. C., as follows: July 1908 to Oct. 1909 Survey Officer, on steamers, assisting on hydrographic work and in charge of sub-parties on triangulation and topography; Jan. to April 1910 topographic survey and triangulation, Monterey Bay, Cal.; May 1910 to Nov. 1912 Survey Officer on Strs. *Explorer* and *Patterson*, Alaska and Panama, Canal Zone, in charge of sub-parties and (April to Nov. 1912) Executive Officer of Str. *Patterson*, magnetic observations on land and sea; Dec. 1912 to March 1914 Computing, Washington, D. C. and Executive Officer, Strs. *Bache* and *Explorer*, on oceanographical work in South Atlantic and surveys, Bering Sea, Alaska; April 1914 to Feb. 1925 in command of various survey steamers on hydrography, topography, triangulation, deep sea soundings, etc., in Alaska, Philippine Islands and California; from Dec. 1917 to March 1919 in U. S. Naval Service as Lieut. and Lieut.-Commr.; since March

1925 Chf. of Party making field investigation of port facilities and conditions for new edition of *U. S. Coast Pilot*. TT 17.2: SP 2: P 15.2: RC 8.4: D 2.1. TT 19.2: SP 4: P 15.2: RC 8.4: D 2.1. Refers to L. O. Colbert, J. H. Hawley, E. H. Pagenhart, W. E. Parker, H. W. Rhodes, H. A. Seran, C. C. Yates.

1383

(1) LUM, CLARENCE KAAWAAPAHULU, 2945 Oahu Ave., Honolulu, Hawaii. (Age 25. Born Honolulu, Hawaii.) 1925 B. S. in C. E., N. Y. Univ. TT 2: SP 2. Aug. 1925 to date Levelman, Honolulu Sewer and Water Comm. TT 1.3: SP 1.3. TT 3.3: SP 3.3. Refers to H. A. R. Austin, E. G. Hooper, A. R. Keller, F. Ohrt, C. T. Schwarze.

1384

(4) MACDONALD, JOHN STEPHEN, 6421 Chew St., Philadelphia, Pa. (Age 33. Born Somerville, Mass.) 1914 B. S. C. E., Dartmouth Coll. TT 2: SP 2. 1913 to date with Patrick McGovern, and Patrick McGovern, Inc., as follows: 1913 to 1915 Foreman on Contract 71A, New York State Barge Canal; 1915 to 1919 Asst. Engr. on Ft. Point Channel Tunnels, Boston, Mass. (2 years) and 60th St. East River Tunnels, New York City (2 years); 1919 to 1921 Asst. Engr. and Supt. on Jersey City (N. J.) Pipe Line; 1921 to 1922 Supt. and Asst. Engr. on 26th Sewer tunnel; 1922 to 1924 Asst. Engr. and Supt. on Rockaway Beach Boulevard, New York City; since 1924 Chf. Engr. on Hammels Sewer, Rockaway, N. Y., and Philadelphia subway work. TT 14: SP 2: P 12: RC 9: D 4. TT 16: SP 4: P 12: RC 9: D 4. Refers to P. G. Brown, R. Fletcher, C. R. Gow, O. E. Hovey, J. R. Rablin, R. Ridgway.

1385

(13) McNAMARA, LESLIE TAYLOR, 1105 Bush St., San Francisco, Cal. (Age 23. Born Houghton, Mich.) 1924 B. S. and E. M., Mich. Coll. of Mines. TT 2: SP 2. Feb. to Oct. 1925 Asst. Engr., Superior & Boston Copper Co., assaying, surveying and sampling. TT 0.7: SP 0.7. Nov. 1925 to May 1926 Estimator, Nevada Irrigation Dist., on materials and costs of flumes and siphons. TT 0.5: SP 0.2: P 0.3. May 1926 to date Field Engr., Jasper-Stacy Co., grades and lines; Foreman of carpenters. TT 0.4: P 0.4. TT 3.6: SP 2.9: P 0.7. Refers to R. Mathew, W. Ruppel, F. H. Tibbetts, R. G. Wadsworth, H. I. Wood.

1386

(10) MATHEWSON, JOHN, Box 895, Vero Beach, Fla. (Age 23. Born Mexico City, Mex.) 1925 B. E., Coll. of Applied Sci., Univ. of Iowa. TT 2: SP 2. July 1925 to date Instrumentman, Carter & Damerow, Vero Beach, Fla., field and office work on subdivisions, surveys, city sewers and pavements. TT 1.2: SP 0.8: P 0.4. TT 3.2: SP 2.8: P 0.4. Refers to A. H. Holt, R. B. Kittredge, B. J. Lambert, F. A. Nagler, E. L. Waterman, S. M. Woodward.

1387

(1) MAURO, GASPER, 148 Rogers Ave., Brooklyn, N. Y. (Age 23. Born Sanbiase, Italy.) 1926 B. S. and C. E., Coll. of City of N. Y. TT 2: SP 2. June to Aug. 1924 Jun. Engr., New York and New Jersey Bridge & Tunnel Comm., surveying. Aug. 1924 to June 1926 Asst. Instructor in Surveying, School of Technology, Coll. of City of New York. TT 2: SP 2. June to Aug. 1926 Asst. to Supt., McArthur Concrete Pile & Foundation Co. TT 0.1: SP 0.1. Aug. to Oct. 1926 Engr., Thomas Crimmins Co., on layout of foundation work. Oct. 1926 to date Asst. to Engr., with Dwight P. Robinson. TT 0.2: SP 0.2. TT 4.5: SP 2.5: P 2. Refers to A. F. Barnes, R. E. Goodwin, F. O. X. McLoughlin.

1388

(2) MOFFETT, JOSEPH GEORGE, 185 Sylvester St., Springfield, Mass. (Age 25. Born Springfield, Mass.) 1925 B. S., Sheffield Sci. School, Yale Univ. TT 2: SP 2. June to Oct. 1925 Supt. Constr. and Engr., M. E. Berry Concrete Const. Co., laying out and executing construction of concrete foundation for 4-story hospital. July to Sept. 1925 Job Engr. and Asst. to Supt., A. E. Stephens Co., building construction. TT 0.2: SP 0.2. May to Aug. 1926 Transitman and Asst. Chf. of Party, City of Springfield. TT 0.3: SP 0.3. TT 2.5: SP 2.5. Refers to P. G. Laurson, C. J. Tilden, J. C. Tracy.

1389

(13) MORRISON, WALTER GORDON, Big Creek, Cal. (Age 23. Born Waimate, New Zealand.) 1926 B. E. (Civ.), Canterbury Coll., Christchurch, New Zealand. TT 2: SP 2. March 1925 to May 1926 Draftsman and Gen. Eng. Asst., Lyttelton Harbor Board; Christchurch, surveying, drafting, etc. TT 1.2: P 1.2. July to Aug. 1926 Transitman, Western Power Co., Stave Falls, B. C., Canada. TT 0.1: P 0.1. Sept. 1926 to date Computer, Constr. Office, Southern California Co., at Big Creek, on survey computations and progress records. TT 0.1: P 0.1. TT 4.8: SP 2: P 2.8. Refers to R. C. Booth, W. L. Chadwick, D. H. Redinger.

1390

(12) NELSON, GEORGE ALVIN, 202 Burke Bldg., Seattle, Wash. (Age 23. Born Litchfield, Minn.) 1925 B. Sc. in Civ. Eng., Univ. of Minn. TT 2: SP 2. June to July 1925 Draftsman for Frederic Bass, Cons. Engr., on plans of Rochester activated sludge sewage

disposal plant. *TT 0.1: SP 0.1.* Aug. 1925 to date with U. S. Coast and Geodetic Survey, on *Str. Explorer*; acted as Recorder and Left Angleman on hydrography and wire drag. Instrumentman on planetable topography and Jun. Watch Officer; Aug. 1926 commissioned Aid. *TT 1.2: SP 1.2.* *TT 3.3: SP 3.3.* Refers to F. Bass, A. S. Cutler, R. D. Horne, F. B. T. Siems.

1391

(12) **PARSON, ARVID FERDINAND**, Care, Southern Pacific Engrs., Oakridge, Ore. (Age 23. Born Stanley, Mich.) 1925 B. S., Ore. State Agrl. Coll. *TT 2: SP 2.* July-Sept. 1923 Chairman, Washington State Highway Dept. Aug. to Sept. 1925 Partyman and Sept. 1925 to date Estimateman, Southern Pacific Co. *TT 1.2: SP 1.2.* *TT 3.2: SP 3.2.* Refers to L. E. Brigham, G. C. Mason, E. D. Roberts, S. H. Sims, O. E. Stanley.

1392

(1) **PEET, GERALD DAYTON**, 12 Berkeley Place, Montclair, N. J. (Age 36. Born Fairview, Iowa.) 1913 C. E., Columbia Univ. *TT 2: SP 2.* May to Sept. 1913 Instructor, Eng. Summer Camp, Columbia Univ. *TT 0.2: P 0.2.* Sept. 1913 to Feb. 1916 with Alexander Potter, New York City, from Sept. 1913 to May 1914 and Dec. 1914 to May 1915, drafting and designing engineering structures; May to Dec. 1914 and May 1915 to Feb. 1916 Res. Engr., on construction of Moorestown (N. J.) Water Works and (after May 1915) of Corpus Christi (Tex.) Water Works. *TT 2.4: SP 1.1: P 1.3: RC 1.3.* Feb. to June 1916 Engr. and Supt. of Constr. on reinforced concrete and earth-filled dam, Santa Gertrudes Ranch, Kingsville, Tex. *TT 0.3: P 0.3: RC 0.3.* June to Nov. 1916 Engr. and Supt. of Constr., automatic sewage pumping station, Mt. Carmel, Pa., for Philadelphia & Reading, Lehigh Valley and Susquehanna Railroad Companies. *TT 0.4: P 0.4: RC 0.4.* Nov. 1916 to May 1917 Res. Engr. in charge of construction of sewerage system and sewage-disposal plant, Piermont, N. Y. *TT 0.5: P 0.5: RC 0.5.* May to June 1917 on investigation of sewerage system, Bethlehem, Pa. *TT 0.8: P 0.8: RC 0.8.* June to Nov. 1917 supervising topographic survey of City of Warren, Ohio, and vicinity for sewerage extensions. *TT 0.3: P 0.3: RC 0.3.* Nov. 1917 to date with Wallace & Tiernan Co., Inc., Newark, N. J., until Nov. 1919 as Sales Engr.; Nov. 1919 to Jan. 1921 Chf. Engr. of Sales Dept. and June 1921 to date Chf. Engr. *TT 8.9: SP 2: P 6.9: RC 6.9: D 6.9.* *TT 15.3: SP 5.1: P 10.2: RC 9.9: D 6.9.* Refers to A. H. Beyer, W. H. Burr, J. K. Finch, G. W. Fuller, W. J. Krefeld, A. R. Murphy.

1393

(8) **PENN, HENRY**, 10359 South Lowe Ave., Chicago, Ill. (Age 39. Born Steinwyckerwalt, Overysel Prov., The Netherlands.) 1910 B. S. in C. E., Univ. of Ill. *TT 2: SP 2.* June 1910 to March 1915 Draftsman, Chicago Bridge & Iron Works, detailing structural steel, estimating, checking, and design of steel structures. *TT 4.7: P 4.7: D 1.* March 1915 to March 1916 Farm Mgr. and April 1920 to April 1922 Ranch Mgr. (private work). April to Sept. 1916 Structural Steel Detailer, American Bridge Co., Chicago, detailing and checking drawings for steel structures. *TT 0.4: SP 0.4.* Sept. 1916 to Dec. 1917 and June to Sept. 1923 Designing Engr. for Mead Morrison Mfg. Co., Chicago, designing and checking designs for large coal- and ore-handling bridges and similar structures. *TT 1.5: P 1.5: D 1.5.* Dec. 1917 to April 1920 Engr., Standard Steel Castings Co., in charge of construction of large steel castings plant; later in charge of all engineering work, construction, maintenance and plant operation layouts. *TT 2.3: P 2.3: RC 2.3.* June 1922 to June 1923 Industrial Gas Sales Engr., Public Service Co. of Northern Illinois, developing operations and apparatus for gas fuel for various plants. *TT 1: P 1: D 1.* Sept. 1923 to date Asst. Prof. of Civ. Eng., Armour Inst. of Technology. *TT 3: P 3: RC 3.* *TT 14.9: SP 2: P 12.9: RC 5.3: D 3.5.* Refers to M. L. Enger, J. R. Griffith, M. K. Jordan, H. R. Kingsley, J. F. Mangold, C. E. Paul, A. E. Phillips, R. L. Stevens.

1394

(1) **POWERS, ELLWOOD DENNIS**, Chamber of Commerce Bldg., Newark, N. J. (Age 31. Born Camden, N. J.) Licensed Structural Engr., Pennsylvania and New Jersey. July 1915 to March 1918 Draftsman and Student Engr. with Eugene S. Powers, Cons. Archt. Engr., on structural steel and reinforced concrete framing plans, computation and (3 months) Rodman. *TT 2.6: SP 2.6.* March 1918 to July 1919 Draftsman and Checker, Hull Structural Dept., Pusey & Jones Shipyard, Gloucester City, N. J., structural drafting and detailing on ship structures, checking drawings and designing engine and gun foundations for ships. *TT 1.2: SP 0.7: P 0.5.* July to Nov. 1919 Structural Engr. with Eugene S. Powers, designing structural steel and reinforced concrete buildings, including reinforced concrete factory (\$400 000, with 60-ft. concrete girder) for S. S. White Dental Co., Philadelphia. *TT 0.4: P 0.4.* Nov. 1919 to Feb. 1920 Structural Engr., Stone & Webster, on power house for Philadelphia Elec. Co. reinforced concrete shop drawings. *TT 0.3: P 0.3.* Feb. 1920 to Jan. 1921 Structural Engr. with E. S. Powers, designing structural steel and reinforced concrete hotels, schools, hospitals, dormitories, commercials, etc. *TT 0.9: P 0.9: RC 0.9: D 0.9.* Jan. 1921 to Jan.

1923 member of firm, Eugene S. Powers and Son, Cons. Archt. Engrs., Philadelphia, and Jan. 1923 to date Newark Representative and Treas., E. S. Powers & Son, Inc., of Philadelphia and Newark, until Jan. 1923 designing construction for structural steel and reinforced concrete buildings, including High School (\$800 000), Kearny, N. J., Gullbert & Bettell's, Archts., and Children's Hospital (\$400 000), Philadelphia, Cope & Stewardson, Archts.; has designed and been responsible for structural designs of buildings (over \$30 000 000), including Essex County Hall of Records (\$2 500 000) and Essex Club (\$300 000), Newark, South Orange High School (\$1 500 000), Vocational School (\$400 000), Irvington, N. J., High School (\$650 000), Greenwich, Conn. *TT 5.8: P 5.8: RC 5.8: D 5.8. TT 11.2: SP 3.3: P 7.9: RC 6.7: D 6.7.* Refers to J. S. Allen, E. C. Epple, W. B. Grigsby, H. B. Nicholson, M. N. Shoemaker, A. J. Taylor, L. B. Woodruff.

1395

(8) **PRIOR, JOSEPH WILLIAM**, 4041 Waveland Ave., Chicago, Ill. (Age 26. Born St. Paul, Minn.) Dec. 1917 to June 1918 Rodman and Inspector, Great Northern Ry. Co., on construction of ore docks. *TT 0.5: SP 0.5.* Sept. 1918 to June 1919 Rodman, Inspector and Instrumentman, War Dept., U. S. Govt., on construction, Norfolk (Va.) Terminal; Asst. to Engr. in charge of concrete dock work. *TT 0.7: SP 0.7.* Oct. 1920 to May 1921 plant work, National Malleable Casting Co. *TT 0.6: SP 0.6.* July to Sept. 1921 Foreman for W. E. Hill, Contr., on construction of concrete retaining walls. *TT 0.2: P 0.2: RC 0.2.* Sept. 1921 to May 1922 and Sept. 1922 to May 1923 student in Civ. Eng., Chicago Technical Coll., part of time during latter period Instructor. *TT 0.7: SP 0.7.* May to Sept. 1922 Fieldman, Bates & Rogers Constr. Co., on construction of bridge, concrete piers and abutments, etc. *TT 0.3: SP 0.2: P 0.1: RC 0.1.* Aug. 1923 to May 1925 Draftsman, May to Dec. 1925 Instrumentman, being Asst. to Div. Engr., and Dec. 1925 to Sept. 1926 Structural Draftsman, Bridge Dept., on design of new bridges, detailing and layouts, all for Chicago, Milwaukee & St. Paul Ry. *TT 3.1: SP 2.7: P 0.4: RC 0.4.* Sept. 1926 to date (part of time in beginning) Chf. Engr., in charge of organizing Eng. Dept. for Jos. DeVore Co., Colombia, South America, construction of buildings and roads. *TT 0.3: P 0.3: RC 0.3.* *TT 6.5: SP 5.5: P 1: RC 1.* Refers to C. N. Bainbridge, H. J. Hansen, A. G. Holt, C. T. Jackson, E. Ottman, Jr., T. H. Strate.

1396

(10) **REX, HARRY McCAHAN**, 618 Hillsboro St., Raleigh, N. C. (Age 28. Born Huntingdon, Pa.) 1918 U. S. Mil. Acad. *TT 2: SP 2.* Sept. 1919 to June 1921 with State Highway Dept., as Concrete Base Inspector, Rodman, Chainman and party work under Dist. Engr. at Bellefontaine, Pa., and Asphalt Inspector at Harrisburg, Pa. *TT 1.8: SP 1.8.* Jan. 1922 to Jan. 1926 Chf. Asphalt Inspector and Constr. Engr. on paving, State Highway Comm., Raleigh, N. C. *TT 4: SP 1: P 3: RC 3.* Jan. 1926 to date Chf. Engr., Amiesite Asphalt Co. of America, Philadelphia, Pa. *TT 0.9: P 0.9. TT 8.7: SP 4.8: P 3.9: RC 3.* Refers to C. N. Conner, G. W. Hutchinson, G. T. MacNab, J. B. Pridgen, C. M. Upham, J. D. Waldrop.

1397

(1) **ROSENBERG, SAMUEL**, 311 Sixth Ave., North Pelham, N. Y. (Age 35. Born New York City.) 1912 B. S. in Civ. Eng., and 1917 C. E., Cooper Union (night school). May 1910 to May 1912 Chainman, New York State Highway Comm., Poughkeepsie Div., assisting in survey, design and estimating, inspecting concrete pavements, etc. *TT 2: SP 2.* May 1912 to May 1913 Jun. Asst., Public Service Comm., First Dist., New York, acting as Chainman and Instrumentman on subway construction and Draftsman on plans for sub-surface structures. *TT 1: P 1.* May 1913 to May 1914 Leveler, New York State Engrs. Dept., Rochester Div., assisting on estimates for barge canal contracts, and Asst. in charge of preliminary survey and design of a river improvement. *TT 1: P 1.* June 1914 to Dec. 1924 (except 1.2 years during 1917 and 1918) Asst. Engr., New York State Highway Comm., Poughkeepsie Div., being Engr. in charge of survey, design, estimating and construction of highways, construction of city streets, sewers, curbs, etc., also on surveys and plans and estimates. *TT 9.3: P 9.3: RC 9.3: D 1.8.* 1917 to 1918 student, Engrs. and Artillery Officers' Training Camps (8 months); with Emergency Fleet Corporation, expediting engineering on concrete ships (2 months); Field Engr., Foundation Co. (2 months); charge of field party for Public Service Comm., New York, First Dist. *TT 1.3: SP 0.7: P 0.6: RC 0.6.* Dec. 1924 to date Res. Engr., Westchester County Park Comm., in charge of preliminary studies and surveys of The Hutchinson River, Cross County and the Pelham Portchester Parkways, and of construction of 5 miles of Hutchinson River Parkway, including street and railroad bridge crossings, river bridges and grading (approx. \$1 000 000, under construction). *TT 1.8: P 1.8: RC 1.8. TT 16.4: SP 2.7: P 13.7: RC 11.7: D 1.8.* Refers to E. Anderberg, J. Barnett, C. L. Barton, C. A. Garfield, A. G. Hayden, L. G. Holleran, F. C. Zeigler.

1398

(1) **SCALES, WILLIAM EDWARD**, 30 Church St., New York City. (Age 57. Born Newton, Mass.) 1888 to 1890 student, Massachusetts Inst. of Technology. 1913 to 1920 New York Representative, and 1920 to date New York Sales Mgr., Giant Portland Cement Co., in connection with reinforced concrete construction, bridges and water-works, Pennsylvania Tunnels, New York subways and roads; cooperating with engineers in experiments on concrete mixture and exchanging technical data. *TT 13: RC 13.* Refers to J. M. Belknap, W. J. Boucher, J. Forgie, C. E. Fraser, R. Ridgway, J. F. Sanborn, J. W. Taussig.

1399

(13) **SHAMBERGER, HUGH ALLAN**, Box 291, Hayward, Cal. (Age 26. Born Kellogg, Idaho.) 1922 A. B., Stanford Univ. *TT 2: SP 2.* June to Sept. 1919 Rodman and Chainman, U. S. Forestry Service. June to Oct. 1920 Chainman, San Joaquin Light & Power Co. April to July 1922 Res. Engr., Stanford Stadium, in charge of constructing drainage system, curbs and track. *TT 0.2: P 0.2: RC 0.2.* July 1922-June 1923 Field Draftsman, Instrumentman and later Chf. of Party, Clear Lake Park Co., on Clear Lake Subdivision, Lake County, Cal. *TT 1: SP 0.5: P 0.5.* July to April 1926 with East Bay Water Co., Oakland, Cal., as follows: July to Oct. 1923 Topographer on water supply investigation, Eel River to Oakland; Oct. 1923 to Jan. 1924 Draftsman; Jan. 1924 to April 1926 on Upper Leandro Dam project, until March 1925 as Chf. of Party on survey for triangulation system and reservoir capacity and after March 1925 Res. Engr. on the dam, and in charge of 3 miles of highway construction. *TT 2.8: SP 0.2: P 2.6: RC 1.1.* April to June 1926 with Geo. Wilhelm, Oakland, Cal., in charge of party on preliminary survey of Little Indian Valley Project, Lake County, including survey for dam and reservoir sites, etc. *TT 0.2: P 0.2: RC 0.2.* June 1926 to date Field Engr., Alameda County, in charge of surveys for 12 miles of highway. *TT 0.4: P 0.4. TT 6.7: SP 2.7: P 4: RC 1.3.* Refers to D. W. Albert, W. B. Boggs, G. W. Hawley, C. D. Marx, G. A. Posey, J. O. Wanzer.

1400

(1) **SHAPIRO, DAVID**, 625 West 113th St., New York City. (Age 23. Born New York City.) 1925 B. C. E., Northeastern Univ. *TT 2: SP 2.* June 1925 to April 1926 on private engineering work. *TT 0.8: SP 0.8.* April to Oct. 1926 Draftsman and Computer, Pennsylvania State Highway Dept. At present graduate student Columbia Univ. *TT 0.5: SP 0.5. TT 3.3: SP 3.3.* Refers to J. B. Babcock, 3d, C. S. Ell, E. A. Gramstorff, J. W. Ingalls.

1401

(12) **SIPPLE, WILLIAM REGINALD**, Maxville, Ore. (Age 24. Born Pekin, Ill.) 1925 B. S., Univ. of Ill. *TT 2: SP 2.* Oct. 1922 to March 1923 Partyman, Pacific Gas & Elec. Co., on power-transmission line location survey in Sierra Nevada Mountains. March to May 1923 Head Chainman, Merced Irrigation Dist., some instrument work. June to Sept. 1923 Head Chainman, July to Aug. 1924 Instrumentman, and Sept. to Nov. 1925 Field Draftsman at Rainier National Park, U. S. Bureau of Public Roads, on highway location, etc. June to July 1924 Asst. Hydrographer, Farmers Reservoir & Irrigation Co., Denver, Colo., stream gauging, surveys, etc. *TT 0.3: SP 0.3.* Aug. 1925 Partyman, Oregon-American Lumber Co., Vernonia, Ore., on logging railroad survey. Jan. to April 1926 Hydrographer, U. S. Engrs., Portland, Ore., on Columbia River survey; Transitman on secondary triangulation survey. *TT 0.3: SP 0.3.* April 1926 to date Engr., Bowman-Hicks Lumber Co., Maxville, Ore., logging railroad location and construction, trestle, bridges, layout of camp sites, water lines, small dams, etc. *TT 0.7: P 0.7. TT 3.3: SP 2.6: P 0.7.* Refers to E. E. Bauer, H. Cross, T. D. Mylrea, T. C. Shedd, C. C. Wiley, C. C. Williams.

1402

(10) **SMITH, LEONARD BUDD**, Box 667, St. Augustine, Fla. (Age 38. Born Bay Shore, L. I.) May to Nov. 1907 Asst. Engr. for Maj. Chas. D. Warner on examination of mining property, North Shore, Lake Superior; surveyed, traversed veins, meandered shores of lakes and rivers, mapped area, measured streams and rivers, etc. *TT 0.4: SP 0.4.* July 1909 to Aug. 1910 on similar work (private) in Newfoundland. *TT 1.1: P 1.1: RC 1.1.* Sept. 1910 to Dec. 1915 Rodman and Transitman, Board of Water Supply, New York City, inspecting concrete work, etc., part of time in charge of field party. *TT 5.3: SP 1: P 4.3.* Jan. 1916-Dec. 1917 Pres. and Mgr., Sussex Limestone Prod. Corp., New Jersey, rebuilt 1½ miles of standard gauge, track, including two trestles (one 220 ft. long); opened quarry, used drills, locomotive crane, guy derricks, etc. *TT 2: P 2: RC 2.* Jan. 1918 to May 1919 (except Sept. to Nov. 1918 Quarry Engr., Air Nitrates Corp., ordering machinery), Jun. Engr., Transit Comm., New York City, until Aug. 1918 in charge of field party excavating and concreting under Long Island R. R. Station, Flatbush Ave., then computing estimates. *TT 1.4: P 1.4.* June 1919 to June 1924 with American Association of Engineers, until Jan. 1920 as Asst. National Secy. (3 months) and Secy., National Qual. Comm., organization and welfare work; Feb. 1920 to June 1921 Dist. Secy., New York City, organization, legislative

and welfare work and (Feb. 1920 to April 1922) Executive Secy., New York Chapter; after April 1922 Mgr., Federal Dept. and Secy., National office, Washington. July 1924 to Aug. 1925 Engr. Salesman, Atlantic Paint Co., New York City, discussed boiler problems with Mech. Engrs. of Govt. Depts. and enginemen of plants, ran tests at Bureau of Standards and Washington Navy Yard, etc. *TT 1.1: P 1.1.* Sept. 1925 to date Field Engr., Gould T. Butler, and (½ years) Res. Engr., in charge of engineering work and contractors on subdivision of 2 large tracts; laid out streets, sidewalks, lots, etc., paved some streets and concreted sidewalks, built bulkhead (½ mile) on ocean, planned units, etc. *TT 1.1: P 1.1: RC 0.9. TT 12.4: SP 1.4: P 1.1: RC 4.* Refers to E. G. Haines, R. Ridgway, D. L. Turner, C. S. Shaughnessy, D. B. Steinman, H. R. Wickham, A. J. Whitson, G. P. Wood.

1403

(3) SMITH, LEWIS BRUTON, 32 Raeburn Ave., Rochester, N. Y. (Age 36. Born Rochester, N. Y.) 1913 C. E., Ohio Northern Univ. *TT 2: SP 2.* Dec. 1907 to Sept. 1910 Rodman, Chairman and Instrumentman, and June to Sept. 1911 Instrumentman, Buffalo, Rochester & Pittsburgh Ry. *TT 2.8: SP 2.8.* June to Sept. 1912 and June to Nov. 1913. Inspector of local and public improvements, City of Rochester, N. Y. *TT 0.4: P 0.4.* Nov. 1913 to April 1914 Transitman for W. S. Lozier, Rochester, in charge of field party on stadia work. *TT 0.4: P 0.4.* April 1914 to May 1924 with City of Rochester as follows: April 1914 to Sept. 1917 Inspector and Sept. 1917 to May 1919 Engr.-in-Chg. on 36-in. conduit from Hemlock Lake to Rochester; had entire charge of layout and construction of 10 miles; May 1919 to Sept. 1923 Asst. to the Deputy City Engr. in charge of municipal construction; Sept. 1923 to May 1924 Asst. Office Engr. in charge of design of sewer systems and pavements; estimates and plans for all local improvements. *TT 10: P 10: RC 6.6: D 0.8.* May 1924 to Jan. 1926 Engr., Geo. R. Newell, Inc., in charge of design of sewer projects and paving districts. *TT 1.6: P 1.6: RC 1.6: D 1.6.* Jan. 1926 to date Vice-Pres., Hevenor & Weller, Inc., on design and construction of sewers, treatment plants, water mains and pavements (aggregate \$5 000 000). *TT 0.8: P 0.8: RC 0.8: D 0.8. TT 18: SP 4.8: P 13.2: RC 9: D 3.2.* Refers to G. P. Hevenor, I. E. Matthews, W. F. Pond, C. A. Poole, J. F. Skinner, W. E. Weller.

1404

(1) SMITH, REUBEN WILLIAM, 311 Drake Ave., Roselle, N. J. (Age 29. Born San Mateo, Cal.) 1922 B. S., Univ. of Cal. *TT 2: SP 2.* Aug. 1922 to Jan. 1924 Forest Asst., Technical Staff, Forest Products Laboratory, U. S. Forest Service, Madison, Wis., research and investigation, with strength test work on airplane wood. *TT 1.4: P 1.4.* Jan. 1924 to July 1925 Chf. Treating Engr., Chas. R. McCormick Lumber Co., St. Helens, Ore., on marine, railway and structural timbers; research strength tests of treated ties. *TT 1.5: P 1.5: RC 1.5.* Aug. 1925 to Sept. 1926 Asst. Prof. Timber Preservation, Syracuse (N. Y.) Univ., inaugurated timber-treating course, teaching construction and maintenance of timber-treating plants; in charge of research investigations on strength and durability of wood. *TT 1.1: P 1.1: RC 1.1.* Sept. 1926 to date Chf., Cons. Dept., Protexol Corporation, Kenilworth, N. J., industrial consulting service, construction and maintenance of wooden structures. *TT 0.3: P 0.3: RC 0.3. TT 6.3: SP 2: P 4.3: RC 2.9.* Refers to W. L. Huber, C. M. Kerr, J. A. Newlin, T. R. C. Wilson, C. P. Winslow.

1405

(5) SNELL, RUTHERFORD, 1403 Laburnam Ave., Richmond, Va. (Age 32. Born Brookneal, Va.) May 1913 to March 1914 with Tri-City Elec. Co., Gary, Ind., estimating, assisting in designing, layout, and surveys for electrical installations. *TT 0.9.* April 1914 to April 1915 with Champion Potato Machinery Co., Hammond, Ind., Asst. to maker of link belt chain conveyors, etc. *TT 1.* May 1915 to Aug. 1917 Tapeman, Rodman, Recorder and Instrumentman, Chicago & North Western Railway Co., Chicago, Ill.; Asst. to Pilot Engr., piloting Interstate Commerce Commission Engrs. over property. *TT 2.3: RC 0.7.* Sept. 1917 to June 1919 with U. S. Army, until April 1918 as 1st Sergeant, Co. L, 317th Infantry, in Training Camp, Camp Lee, Va., assisted Regimental Engr. Officer in design, layout and construction of trench fortifications for training purposes, etc.; May 1918 to June 1919 Overseas, training and defense with British Army in front line (two months), at Army Officers' School, Langres, France (1 month), then with 313th Engrs. and 9th Corps, 2nd Army Headquarters, at front in combat, pioneering, sapping, road construction, bridge building, construction of wire and dugout defences, reconstruction of 10 miles of double-track railway between Pont-a-Moussons and Conflans, France. *TT 1.9: RC 0.9: D 0.1.* Aug. 1918 to June 1919 with Chicago & North Western Ry. Co., Chicago, Ill., as Asst. to Pilot Engr., piloting Interstate Commerce Commission Engrs. over property, computing, etc. *TT 0.7: RC 0.7.* April 1920 Res. Engr., Virginia State Highway Comm., on construction of macadam highway (3 miles) in Nelson County, Va. *TT 0.1: RC 0.1.* May 1920-May 1924 Asst. Engr. and June

1924 to date Office Engr., Valuation Dept., Chesapeake and Ohio Ry. Co., Richmond, Va., in charge of roadway and track, bridges and buildings, computation and verification of quantities, study and development of cost data of railway construction; represented Company during revision of Engineering Report by Bureau of Valuation, Interstate Commerce Comm.; quantities, estimates, etc., for purchase or lease of various short lines, estimates on terminals, branches and individual structures; prepared engineering part of protest to tentative valuation, assisted Valuation Engr. in formal conference with engineers of Interstate Commerce Comm., etc. *TT 6.5: RC 6.5. TT 13.4: RC 8.9: D 0.3.* Refers to A. C. Copland, G. W. Hand, C. R. Howard, L. R. Maddox, C. Miller, J. P. Nelson, E. F. Wendt.

1406

(12) **SOBIERALSKI, ALFRED MODESTO**, 202 Burke Bldg., Seattle, Wash. (Age 41. Born Brooklyn, N. Y.) Sept. 1904 to May 1908 student, Coll. of Civ. Eng., Cornell Univ. *TT 1: SP 1.* Summers 1905-1907 Tracer and Structural Draftsman, American Bridge Co. May 1908 to date Hydrographic and Geodetic Engr., U. S. Coast and Geodetic Survey, engaged as follows: May 1908 to March 1909 Observer, wire-drag surveys, Maine, Massachusetts & Florida; March 1909 to Dec. 1910 Observer, Computer and Instrumentman on triangulation, surveys, etc., at various places; Jan. 1911 to March 1912 Observer, gravimetric survey, telegraphic longitudes, standardization of gravity instruments for Mexican Geodetic Comm.; March 1912 to Dec. 1915 Executive Officer and Prin. Asst. Engr. on U. S. S. *Patterson*, *Gedney* and *McArthur* on triangulation, observations, surveys, etc.; Jan. 1916 to March 1919 commanding U. S. S. *Marinduque* and *Pathfinder* in charge of surveys, etc., Palawan Island and Sulu Sea, P. I.; Aug. to Dec. 1919 reconnaissance, precise triangulation, Puget Sound, part of arc to Alaska; Jan. 1920 to Dec. 1921 Executive Officer and Prin. Asst. Engr., U. S. S. *Surveyor*, surveys, Alaska; Dec. 1921 to Feb. 1923 commanding U. S. S. *Wenonah* in charge precise triangulation, including base measurement, hydrographic and topographic surveys in Alaska; Feb. to Dec. 1923 commanding U. S. S. *Lydonia* in charge off shore surveys, Florida, and North Carolina, including investigation of off shore spring and current observations in Gulf Stream; since Jan. 1924 commanding U. S. S. *Surveyor* in charge, triangulation, etc., and off shore surveys, Cape Ommaney to Icy Point, Alaska (annual expenditure over \$100 000). *TT 18: RC 14.8: D 7.4. TT 19: RC 14.8: D 7.4.* Refers to L. O. Colbert, F. H. Hardy, N. H. Heck, C. V. Hodgson, G. T. Rude, P. C. Whitney.

1407

(8) **SORENSEN, ALTON HARRY**, 108 N. Romine St., Urbana, Ill. (Age 24. Born Salt Lake City, Utah.) 1926 B. S., Univ. of Utah. *TT 2: SP 2.* June to Aug. 1926 Res. Engr., Caldwell & Richards, Civ. Engrs., on sewer and waterworks installation at Park City, Utah. *TT 0.2: SP 0.2. TT 2.2: SP 2.2.* Refers to H. L. Baldwin, E. S. Borgquist, W. C. Huntington, R. B. Ketchum, R. R. Lyman, J. Vawter, W. M. Wilson.

1408

(1) **SOROKA, MARY OLGA**, 793 Eighth Ave., Astoria, N. Y. (Age 21. Born New York City.) 1926 S. B., Mass. Inst. Tech. *TT 2: SP 2.* Refers to H. K. Barrows, C. M. Spofford.

1409

(8) **SPEER, CARL, Jr.**, 6813 Overhill Ave., Edison Park, Chicago, Ill. (Age 24. Born Baltimore, Md.) 1923 B. S., and 1926 M. S., Johns Hopkins Univ. *TT 2: SP 2.* June to Oct. 1921 Rodman, and June to Oct. 1922 Inspector on construction, Maryland State Roads Comm. June 1923 to Oct. 1924 Jun. Engr., New York Transit Comm., on traffic engineering of subways and elevated lines. *TT 1.3: P 1.3.* Oct. 1924 to June 1926 graduate student in San. Eng., Johns Hopkins Univ. June 1925 to Feb. 1926 (by permission of Univ.) with Maryland State Dept. of Health on oyster investigation. *TT 1.7: SP 1.7.* July 1926 to date Jun. San. Engr., Div. of Water Safety Control, City of Chicago. *TT 0.3: P 0.3. TT 5.4: SP 2: P 3.4.* Refers to T. F. Comber, Jr., J. H. Gregory, G. W. Putnam, J. T. Thompson, A. Wolman.

1410

(1) **STROMSTED, FINN**, 6711 Fort Hamilton Parkway, Brooklyn, N. Y. (Age 30. Born Loedingen, Norway.) 1921 C. E., Tech. Univ. of Norway. *TT 2: SP 2.* Sept. 1921 to July 1922 Survey Contr.; surveyed and constructed maps of properties for two Norwegian Government Depts. *TT 0.8: P 0.8: RC 0.8.* Nov. 1922 to Aug. 1923 Draftsman, Aker Municipal Eng. Dept., surveying, computing field notes, drawing maps, street plans, etc. *TT 0.8: SP 0.8.* Sept. 1923 to Jan. 1924 Draftsman, Phoenix Utility Co., Allentown, Pa., in field office at Hawley, Pa., computing field notes and drawing maps in hydro-electric survey investigation. *TT 0.3: SP 0.3.* April-Dec. 1924 Draftsman, and Jan. to Sept. 1925 Senior Draftsman and Squad Chf., Pennsylvania State Highway Dept., Allentown, computing field notes, drawing topography and profiles, in charge of designing squad on construction for concrete highways. *TT 1.4: SP 0.7: P 0.7: RC 0.7: D 0.7.* Sept. 1925 to Oct. 1926

Designer, Elec. Bond & Share Co., New York City, hydraulic designing, reinforced concrete substructures on steam-electric power-plant buildings. *TT 1.1: P 1.1: RC 1.1: D 1.1. TT 6.4: SP 3.8: P 2.6: RC 2.6: D 1.8.* Refers to S. P. Cobb, E. N. Peterson, O. Singstad.

1411

(2) **TOPPER, RAYMOND SMITH**, 84 Vine St., Hartford, Conn. (Age 35. Born Hyndman, Pa.) 1908 to 1913 Apprentice, Virginia Bridge & Iron Co., Roanoke, Va., drafting, estimating, designing and shop work in structural steel. *TT 4: SP 2: P 2: D 1.* 1913 to 1917 Chf. Draftsman, Maritime Bridge Co., New Glasgow, N. S., Canada, in charge of part of designing, engineering and selling of bridges, buildings, blast and open hearth furnaces and material-handling plants. *TT 4: P 4: RC 4: D 2.* 1917 to 1919 with Nova Scotia Steel & Coal Co., New Glasgow, as Engr. in charge of construction, on design of coal and ore-handling plants and steel mill construction. *TT 2: P 2: RC 2: D 2.* 1919 to 1920 with Ferris Bridge Co., Cumberland, Md., as Engr. in charge of Charleston office, designing, estimating, etc. on bridges, buildings and mine structures. *TT 1: P 1: RC 1: D 1.* 1920 to 1923 Contr. Mgr., Porcupine Co., Bridgeport, Conn., in charge of engineering, estimating and sales of steel frames of buildings, etc. *TT 3.5: P 3.5: RC 3.5: D 3.5.* 1923 to date Sales and Constr. Engr., Topper & Griggs, Hartford, designing structural steel and reinforced concrete buildings, etc. *TT 3: P 3: RC 3: D 3. TT 17.5: SP 2: P 15.5: RC 13.5: D 12.5.* Refers to C. F. Chase, C. J. French, E. F. Griggs, G. L. Mylchreest, G. B. Taylor, P. R. Williamson.

1412

(7) **UPP, PHILIP ALFRED**, 313 West Allegan St., Lansing, Mich. (Age 28. Born Edgerton, Ohio.) 1923 B. S. in C. E., Case School of Applied Sci. *TT 2: SP 2.* June 1923 to April 1924 Jun. Engr., Illinois State Highway Dept., drafting and design of road plans and field inspection. *TT 0.9: SP 0.9.* April 1924 to Oct. 1925 Asst., Eng. Corps, Chicago & Eastern Illinois Ry. Co., maintenance of way, surveys, drafting and estimates. *TT 1.5: SP 1.5.* Oct. 1925 to date Bridge Draftsman and Designer, Michigan State Highway Dept., design, detailing and estimates. *TT 0.9: SP 0.9. TT 5.3: SP 5.3.* Refers to W. D. Kelley, C. A. Melick, F. H. Neff, B. C. Tiney, A. W. Wand.

1413

(1) **VAN GIESON, WILLIAM HOGENCAMP**, 41 Center St., Hillside, N. J. (Age 48. Born Long Island, N. Y.) Licensed Prof. Engr., State of New York. 1895 to 1901 Apprentice Draftsman, Passaic Rolling Mill Co., Paterson, N. J., detailing (shop drawings) structural steel for buildings and bridges. *TT 6: SP 6.* 1901 to 1903 Draftsman and Checker, Milliken Bros., New York City, detailing and checking structural steel for buildings and bridges. *TT 2: SP 2.* 1903 to 1904 Designer, structural steel buildings, with Clinton & Russel, Archts., New York City. *TT 1: P 1: D 1.* 1904 to 1908 Chf. Draftsman, J. B. & J. M. Cornell Co., New York City, on structural steel for buildings and bridges, entire responsibility of Engr. Dept. *TT 4: P 4: RC 4: D 4.* 1908 to 1910 Squad Boss, Hay Foundry & Iron Works, Newark, N. J., structural steel for buildings. *TT 2: P 2: RC 2.* 1910 to 1923 and 1924 to 1925 Chf. Engr., in charge of Engr. Dept., Hedden Iron Constr. Co., Hillside, N. J., on design and detail of structural steel. *TT 13.3: P 13.3: RC 13.3: D 13.3.* 1923 to 1924 Engr. and Mgr., C. J. Jeppesen, Inc., New York City, on design and shop details of structural steel for buildings. *TT 0.7: P 0.7: RC 0.7: D 0.7.* 1925 to 1926 Chf. Engr., A. E. Norton Co., New York City. *TT 0.3: P 0.3: RC 0.3.* Jan. 1926 to date member of firm, Van Gieson & Downie, Cons. Engrs., New York City. *TT 0.8: P 0.8: RC 0.8: D 0.8. TT 30: SP 9: P 21: RC 21: D 19.7.* Refers to H. G. Balcom, L. A. Ball, G. H. Blakeley, J. P. Churchill, J. Dougan, R. W. Nickerson, H. M. Ward.

1414

(10) **WATSON, RICHARD CHARLES SANCHEZ**, P. O. Box 364, Hattiesburg, Miss. (Age 50. Born Eagle Pass, Tex.) 4 years student, St. Pauls School, London, England, and Royal School of Mines, South Kensington, London, England. 1898 to 1905 Rodman, Chairman and Levelman on various works in West Africa, South America, and other places. *TT 7: SP 7.* 1905 to 1913 Surveyor and Mine Engr. on small properties in Bolivia, Peru and Brazil, and (1910-1912) Instrumentman and Rodman, Madiera Mamore Ry., Brazil. *TT 7: SP 3: P 4: RC 4.* Sept. 1913 to Jan. 1914 Asst. Constr. Engr., Commonwealth Steel Co., Granite City, Ill., on steel buildings and heavy prime mover foundation, layouts. *TT 0.4: P 0.4: RC 0.4.* Jan. to March 1914 Instrumentman for contractor on building construction, State Fair Ground, Springfield, Ill. *TT 0.2: SP 0.2.* May 1914 to Oct. 1915 Plant Engr., St. Louis Smelting and Refining Co., Collinsville, Ill., reconstruction bag house, blast furnaces, open hearth, house, revision of industrial tracks and fume-disposal plant. *TT 1.5: P 1.5: RC 1.5.* Nov. 1915 to Oct. 1916 Mine Engr., St. Joseph Lead Co., Bonne Terre, Mo., triangulation and surveys. *TT 1: P 1.* Oct. 1916 to Nov. 1917 Mine Surveyor, Donk Bros. Coal & Coke Co., St. Louis, Mo., mine maps and operation. *TT 1: P 1.* Nov.

1917 to March 1919 Computer and Senior Engr., Valuation Dept., St. Louis & San Francisco Ry., on surveys, double track and extensions, maintenance and construction. *TT 1.4: P 1.4: RC 0.7.* March to Dec. 1919 in private practice, surveys for mine operations and planning layouts for Richmond Dist. Coal Mines, near Kansas City, Mo. *TT 0.7: P 0.7: RC 0.7.* Dec. 1919 to Jan. 1925 as Senior Instrumentman and Spiral Party Chf., Missouri Pacific R. R., on yard layouts, maintenance and drainage investigation. *TT 5.1: P 5.1: RC 2.* June 1925 to date member of firm, Howorth and Watson, paving for Forrest Co. Paving Dist. No. 1, design and supervision of Purvis water-works and power plant, Bay Springs, water-works, county roads and bridges. *TT 1.5: P 1.5: RC 1.5: D 1.5.* *TT 26.8: SP 10.2: P 16.6: RC 10.8: D 1.5.* Refers to E. F. Delery, D. E. Gelwix, A. A. Miller, F. T. Myers, W. H. Vance, R. E. Wachter.

1415

(2) WHALAND, NORMAN DELBERT, 61 Fourteenth Ave., Haverhill, Mass. (Age 29. Born Merrimac, Mass.) 1925 B. S. in Civ. Eng., Carnegie Inst. Tech. *TT 2: SP 2.* June 1925 to Sept. 1926 with Pennsylvania State Highway Dept., as Inspector and Rodman on concrete roads and bridges. *TT 1.2: SP 1.2.* *TT 3.2: SP 3.2.* Refers to F. J. Evans, F. M. McCullough, C. B. Stanton, H. A. Thomas.

1416

(1) WOLF, EDWARD WILLIAM, Little Plains Rd., Southampton, N. Y. (Age 34. Born North Troy, N. Y.) 3 years student, Rensselaer Polytechnic Inst. *TT 1: SP 1.* June 1913 to Sept. 1915 Transitman, Surveyor and Inspector, U. S. Engr. Office, at Troy and Albany, N. Y. *TT 2.3: SP 2: P 0.3: RC 0.3.* Sept. 1915 to Sept. 1916 Engr. and Surveyor with Seth J. Raynor, Southampton, N. Y., in charge of surveys, golf-course layout and construction, and plans, construction, etc., of sidewalks, curb and gutter. *TT 1: P 1: RC 1: D 0.2.* Sept. to Oct. 1917 Cadet, Aviation Corps, U. S. Army. Oct. to Dec. 1917 Transitman, Title Guarantee & Trust Co., New York City. *TT 0.2: SP 0.2.* Dec. 1917 to Feb. 1918 Jun. Engr., Public Service Comm., New York City, on final estimates of Lexington Ave. Subway. *TT 0.2: P 0.2.* Feb. to June 1918 Efficiency Engr., Gas Defence Plant, Long Island City, N. Y., in charge of section making gas masks for U. S. Army. *TT 0.4: P 0.4: RC 0.4.* July 1918 to July 1919 Chauffeur, U. S. Army, in France and Germany. Sept. 1916 to Aug. 1917 and July 1919 to date Engr. and Surveyor with Wallace H. Halsey, Southampton, in charge of surveys, plans and construction of concrete roads, walks, curbs and gutters and sewage-disposal plants. *TT 8.3: P 8.3: RC 8.3: D 3.3.* *TT 13.4: SP 3.2: P 10.2: RC 10: D 3.5.* Refers to W. H. Halsey, C. F. Morse, A. O. Smith, N. N. Tiffany, L. E. Van Etten.

1417

(13) WOOD, LEWIS KEYSER, 2119 Addison St., Berkeley, Cal. (Age 25. Born Eureka, Cal.) 1925 B. S., Dept. of Civ. Eng., Univ. of Cal. *TT 2: SP 2.* June to Dec. 1925 Steel Fabricator's Representative, Eureka (Cal.) Boiler Works, on erection of saw mill power plant, structural steel layout in shop. *TT 0.5: SP 0.3: P 0.2.* Feb. 1926 to date Asst. Engr., California Bridge & Tunnel Co., drafting computing and progress reports, etc. *TT 0.7: P 0.7: TT 3.2: SP 2.3: P 0.9.* Refers to R. E. Davis, C. Derleth, Jr., F. S. Foote, P. A. Swafford, G. E. Troxell.

FOR TRANSFER

FROM THE GRADE OF ASSOCIATE MEMBER

1418

(1) BLAIR, ALEXANDER, Assoc. M., 264 West Dudley Ave., Westfield, N. J. (Elected May 7, 1913.) (Age 48. Born Birkenhead, England.) Licensed Professional Engr., State of New Jersey. 1896 to 1903 Apprentice (5 years) and Head of Importing Dept. (3 years) with G. & J. Nickson & Co., Ltd., Liverpool, England. 1904 to 1905 Accountant, Statistical Dept. of London Assurance Corporation, New York City. Sept. 1905 to March 1906 Rodman, Chainman and Computer for A. Schumacher, Millington, N. J. *TT 0.6: SP 0.6.* April 1906 to Dec. 1908 Transitman, Draftsman, Computer and Res. Engr. for John S. Stiger, Bernardsville, N. J., on surveys, drainage, water and sewer systems, roads, bridges and river dykes on large estates in Somerset Hills. *TT 2.7: SP 2.7.* Jan. 1909 to Aug. 1912 Asst. City Engr. and Sept. 1912 to Dec. 1915 City Engr., Summit, N. J., on design and construction of sanitary and storm sewers (including tunnel), roads and sidewalks, etc.; after Sept. 1912 also member of firm, Blair, Hillard & Shinn Co., Inc., engineering and surveying. *TT 7: P 7: RC 3.3: D 6.3.* Jan. to May 1916 Special Student in San. and Structural Eng., Massachusetts Inst. of Technology. July 1916 to Aug. 1919 with Canadian & British Expeditionary Forces, Infantry and Engr. Corps, 1½ years as Div. Engr. Officer on trench construction, wire entangle-

ment, artillery, bridges and camp construction and demolition; in France (2 years). TT 3.2: SP 1: P 2.2: RC 1.5: D 1. Oct. 1919 to March 1923 Asst. Engr., Bridge Dept., New Jersey State Highway Comm., in charge of party on surveys, river soundings, foundation test borings (core drill), land and water, and test piles for foundations, design of bridges. TT 3.5: SP 3.5: D 2. April 1923 to date Town Engr., Westfield, N. J., on design and construction of sanitary and storm sewers, road paving, sinking water test wells and study of water supply and sewage disposal. TT 3.8: P 3.8: RC 3.8: D 3.8. TT 20.8: SP 7.8: P 13: RC 8.6: D 13.1. Refers to C. P. Bassett, J. L. Bauer, D. C. N. Collins, N. S. Hill, Jr., C. A. Mead, R. A. Meeker, J. L. Vogel.

1419

(4) BOASE, ARTHUR JAMES, Assoc. M., Care, Pennsylvania Military Coll., Chester, Pa. (Elected March 7, 1921.) (Age 34. Born Central City, Colo.) 1913 B. S. in C. E., Univ. of Colo. M. S. and C. E., Univ. of Pa. TT 2: SP 2. Jan. 1909 to Jan. 1910 Rodman, and Jan. 1910 to Jan. 1912 Transitman in charge of party Boston Colorado Power Co. TT 3: SP 3. Jan. 1912 to Jan. 1913 with Fred A. Fair Eng. Assoc., on engineering, principally hydro-electric and irrigation work. TT 1: SP 1. Jan. 1913 to June 1918 (while student at Univ. of Colorado) Deputy County Surveyor, and Sept. 1918 to Sept. 1920 County Surveyor in charge of design and construction of highways and bridges, Boulder County, Colo. TT 2: P 2: RC 2: D 2. Sept. 1920 to June 1923 Instructor, Civ. Eng., Univ. of Pennsylvania. TT 2: P 2. Sept. 1923 to date Head of Dept., Civ. Eng., Pennsylvania Military Coll. TT 2.3: P 2.3: RC 2.3. Summers 1923 to 1926 Detailer American Bridge Co. (1923-1924), with Constr. Dept., Univ. of Colorado (1925), and design and construction work, Pennsylvania Military Coll. (1926). TT 1.1: SP 0.5: P 0.6: RC 0.6: D 0.6. TT 13.4: SP 6.5: P 6.9: RC 5: D 2.6. Refers to C. L. Eckel, W. C. Huntington, M. S. Ketchum, C. E. Myers, A. E. Palen, W. S. Pardoe.

1420

(7) CHANDLER, ELWYN FRANCIS, Assoc. M. University Station, N. Dak. (Elected Feb. 1, 1910.) (Age 54. Born Yellow Springs, Ohio.) 1894 B. A., and 1897 M. A. Ripon Coll., Wis. TT 2: SP 2. 1897 to 1899 Student, Graduate Dept., Univ. of Wisconsin. TT 2: SP 2. 1889 to 1894 (at times) Rodman, Transitman, Land Surveyor, or Draftsman for various employers. April to Sept. 1895 City Engr., Ripon, Wis., in charge of construction and revision of design of city sewer system, etc. TT 0.3: P 0.3: RC 0.2. 1896 to 1899 (vacations) Acting City Engr., Ripon, Wis., on sewer and filter-plant construction; lake surveys for Wisconsin State Geological Survey; private land surveys, etc. June 1899 to date with Univ. of North Dakota, as follows: June to Aug. 1899 Supt. of Constr. in charge of erection of two brick buildings, sewer systems, heating plant, etc.; Sept. 1899 to June 1902 Instructor in, July 1902 to June 1904 Asst. Prof., and July 1904 to June 1914 Prof., of Mathematics; from July 1910 to June 1914 in charge of Civ. Eng. course; July 1914 to date Prof. of Civ. Eng. Sept. 1925 to June 1926 Acting Dean, and since June 1926 Dean, Coll. of Eng. TT 13.2: P 13.2: RC 13.2: D 0.5. Also, May 1903 to June 1921 Asst. Engr., and July 1921 to date (part of time) Hydr. Engr., Water Resources Branch, U. S. Geological Survey, on maintenance and supervision of river-station records, etc., in North Dakota and adjoining territory. TT 4.6: SP 0.3: P 4.3: RC 4.1: D 0.4. July 1904 to March 1905 (part of time) State Engr., North Dakota, irrigation development, etc. TT 0.3: P 0.3: RC 0.3: D 0.2. June 1917 to March 1923 Expert Witness, Attorney General's Office, North Dakota, on interstate drainage suit, Dakota vs. Minnesota. TT 0.3: P 0.3: RC 0.3: D 0.1. 1915 to 1926 Cons. Engr. on water power, flood control, drainage, irrigation, expert witness, etc. TT 0.5: P 0.5: RC 0.5: D 0.2. TT 21.2: SP 2.3: P 18.9: RC 18.6: D 1.4. Refers to F. L. Anders, T. R. Atkinson, J. E. Carroll, N. C. Grover, J. A. McLean, A. F. Meyer, M. L. Monley, E. H. Morris, F. C. Shenehon, G. E. Stratton, E. V. Willard.

1421

(7) LIVINGSTON, RAY CLIFFORD, Assoc. M., Pierre, S. Dak. (Elected March 7, 1921.) (Age 41. Born Mexico, Mo.) May to Sept. 1907 Draftsman, Delaware, Lackawanna & Western R. R., Hoboken, N. J. TT 0.3: SP 0.3. May to Aug. 1908 Draftsman, Missouri Pacific Ry., St. Louis, Mo. TT 0.2: SP 0.2. May to Aug. 1909 Topographic Draftsman, East Side Levee and San Dist., East St. Louis, Ill. TT 0.2: P 0.2: D 0.2. May to Dec. 1910 with St. Louis South Western Ry., Tyler, Tex. TT 0.7: P 0.7: RC 0.2: D 0.2. Dec. 1910 to March 1911 Mech. Designer, American Brake Co., St. Louis, Mo. TT 0.2: P 0.2: D 0.2. March to May 1911 Structural Detailer, Purdy & Henderson, Chicago, Ill. TT 0.1: P 0.1: D 0.1. June 1911 to June 1912 on location and construction of Rock Island Lines, Camden, Ark. TT 1: P 1: RC 0.5: D 0.2. June 1912 to Sept. 1913 in charge of maintenance party, Chicago, Milwaukee & St. Paul Ry., Minneapolis, Minn. TT 1.2: P 1.2: RC 0.5: D 0.7. Sept. 1913 to

Nov. 1914 Jun. Engr., City of Minneapolis, plans for, and construction of new filters and coagulation basins. *TT 1.1: P 1.1: RC 0.6: D 0.5.* Nov. 1914 to Aug. 1916 Asst. Engr., Minneapolis & St. Louis Ry., Minneapolis, Minn., on valuation maps and profiles. *TT 1.7: P 1.7: RC 1: D 0.7.* Aug. 1916 to June 1922 Highway Engr., Hennepin County, Minn., in responsible charge of design and construction of highways and bridges around Minneapolis, and (3½ months) 1st Lieut., Engrs., U. S. Army. *TT 5.8: P 5.8: RC 3.3: D 2.5.* June 1922 to date Highway Engr., U. S. Bureau of Public Roads, until April 1923 in San Francisco, on review of plans for forest roads, since April 1923 inspection, reports, etc., on Federal Aid roads in South Dakota. *TT 4.4: P 4.4: RC 4.4.* *TT 17.3: SP 0.6: P 16.7: RC 10.6: D 5.7.* Refers to J. W. Ball, W. G. Black, W. R. Goodwin, J. A. Jenson, W. N. Lovejoy, E. H. Quinney.

1422

(7) **LOVERING, HARRY DOUGLAS**, Assoc. M., 14 Benhill Road, St. Paul, Minn. (Elected Jun., Sept. 2, 1914; Assoc. M., Oct. 14, 1919.) (Age 34. Born St. Paul, Minn.) 1913 B. S. in C. E., and 1914 C. E., Univ. of Minn. *TT 2: SP 2.* 1913 to 1914 engineering graduate work, Univ. of Minnesota. *TT 1: P 1.* 1914 Chairman and Inspector, Chicago, St. Paul, Minneapolis & Omaha Ry. (3/10 year) and Asst. Engr., F. H. Romer Const. Co. (3/10 year). *TT 0.6: SP 0.6.* 1915 Draftsman for Adolph Meyer, Hydr. Engr. (1/10 year) and Accountant and Inspector on building construction, J. H. Allen Co., wholesale grocers (½ year). *TT 0.4: SP 0.4.* 1915 to 1916 Engr. and Asst. Supt., Hodgkin Const. Co., on building construction (Ford Plant), Oklahoma City. *TT 1: P 1: RC 0.2.* 1916 to 1917 Engr. and Asst. Supt., James Stewart & Co., Salt Lake City, on construction of D. S. L. R. R. Terminal, Pocatello, Idaho, Sugar Factory, Moroni, Utah and cantonment, Little Rock, Ark. *TT 1.4: P 1.4: RC 0.4.* 1918 to 1919 with U. S. Army, 1st Lieut., Engr. Officers Reserve Corps, A. E. F. and Capt., Engrs., Camp Humphrey, Va.; at present Capt., Engr. Reserve Corps. *TT 1.1: P 1.1: RC 0.5.* 1919 Asst. Engr., Minnesota Highway Dept., design *TT 0.2: P 0.2: D 0.1.* 1919 to 1920 Engr., Toltz, King & Day, St. Paul, building design and construction. *TT 1: P 1: D 0.5.* 1920 to 1923 member of firm, Lovering-Longbotham Co., Contrs. & Engrs., and 1924 to date Secy. & Treas. Lovering-Longbotham Co., Inc., Constructors, until 1923 designed factories for Allen Qualley Co., St. Paul, J. N. Collins Co., Minneapolis, warehouse for Healy-Ruff Co., St. Paul and stores in St. Paul and Minneapolis; constructed 4-story reinforced concrete building for Daily News Publishing Co. and Builders Exchange (13 stories) St. Paul, apartment and hotel St. Petersburg, Fla., First National Bank Bldg., Fargo, N. D., and other buildings in Minnesota, North Dakota and Florida. *TT 6.5: P 6.5: RC 5: D 1.5.* *TT 15.2: SP 3: P 12.7: RC 6.1: D 2.1.* Refers to F. Bass, W. N. Carey, G. H. Herrold, W. S. Hewett, W. E. King, G. M. Sheppard.

1423

(15) **McKEAN, ALEXANDER MATTHEWS, Jr.**, Assoc. M., 4812 St. Charles Ave., New Orleans, La. (Elected Junior April 18, 1916; Assoc. M. May 8, 1922.) (Age 36. Born Providence, R. I.) Sept. 1910 to April 1913 Chainman, Rodman and Draftsman, and Jan. 1914 to Oct. 1915 Instrumentman, Southern New England Ry. Co. *TT 4.4: SP 4.4.* April 1913 to Jan. 1914 farming, Richdale, Alberta, Canada. Oct. 1915 to April 1917 Instrumentman and Asst. Engr., Providence Board of Water Supply, preliminary surveys and studies for water-supply system. *TT 1.5: SP 0.8: P 0.7: RC 0.7.* April to Nov. 1917 Shipfitter, Fore River Shipbuilding Corporation, hull construction of destroyers. *TT 0.6: SP 0.6.* Nov. 1917 to Oct. 1919 Planner and Estimator, Brooklyn (N. Y.) Navy Yard, on hull construction of S. S. *New Mexico* and *Tennessee*, and repair work on transports and destroyers. *TT 1.9: SP 0.9: P 1: RC 1.* Oct. 1919 to date Asst. Engr. and Chf. Engr., Mexican Petroleum Corporation, Pan American Petroleum Corporation, on design and construction also alteration and repair of petroleum storage terminals and marketing stations. *TT 7: P 7: RC 7: D 7.* *TT 15.4: SP 6.7: P 8.7: RC 8.7: D 7.* Refers to E. D. Buel, J. F. Coleman, R. W. Knight, A. Larsen, G. T. Seabury.

1424

(3) **METCALFE, ALFRED HAROLD**, Assoc. M., 126 N. Water St., Rochester, N. Y. (Elected March 13, 1917.) (Age 38. Born Brooklyn, N. Y.) Licensed Prof. Engr. and Land Surveyor, New York State. 1910 C. E., Syracuse Univ. *TT 2: SP 2.* June to Oct. 1910 Rodman, New York Central R. R. *TT 0.3: SP 0.3.* Oct. 1910 to Sept. 1911 Asst. Engr. (under G. F. Swain), valuations, New York, New Haven & Hartford R. R., investigated types and costs, bridge foundations for Massachusetts R. R. Comm.; New York Central R. R., divided system into territorial units, mass diagrammed and computed overhaul several hundred miles of line. *TT 0.9: P 0.9: RC 0.5.* Sept. 1911 to Aug. 1912 Res. Engr. on construction of Halite & Northern R. R., including yards and buildings (\$100 000), Livingston, N. Y. *TT 0.9: P 0.9.* Aug. 1912 to Nov. 1913 Asst. Engr., consulting office, New York City, compiled statistics, made estimates, maps, diagrams and graphic charts and worked out analytical

problems; designed concrete reservoir (\$10 000), Nyack, N. Y.; reported on Roloff Heavy Oil Carbureter Co. and American Infusion Steel Process Co.; assisted W. H. Coverdale on reports of physical condition and earning power of various properties. *TT 1.2: P 1.2: RC 0.5: D 0.5.* Nov. 1913 to Jan. 1914 Levelman and Transitman, New York, Pittsburgh & Chicago E. R. *TT 0.2: SP 0.2.* Jan. to June 1914 Asst. Engr., consulting office, New York City, redesigned reinforced concrete dam (60 feet) Leoncita Irrigation Project, assisted W. H. Coverdale and W. W. Colpitts on various reports; designed and supervised road construction (\$15 000) on private estate, Katonah, N. Y. *TT 0.5: P 0.5: RC 0.3: D 0.3.* June 1914 to July 1915 Eng. Inspector in charge of estimates and costs, Centre Street Loop, subway construction (\$800 000) for Jacobs & Davies, Inc., New York City. *TT 1.1: P 1.1: RC 0.5.* July to Oct. 1915 Topographer, Delaware and Hudson Co. *TT 0.3: P 0.3.* Nov. 1915 to March 1916 Reinforced Concrete Designer, power plant, Piedmont, W. Va., and electrolytic bleach plant (\$200 000), Johnsonburg, Pa., for West Virginia Pulp and Paper Co., New York City. *TT 0.3: P 0.3: RC 0.3: D 0.3.* March 1916 to Oct. 1918 and Aug. 1919 to July 1924 Chf. Engr., A. Friederich & Sons Co., Contrs., Rochester, N. Y., in charge of bids, estimates, competitive structural designs, construction plant layouts, plans, costs and had general supervision of construction (\$6 000 000); tests and reports, appraisals, etc. *TT 7.5: P 7.5: RC 7.5: D 7.5.* Oct. 1918 to Aug. 1919 Chf. Draftsman, Gen. Contr. and Eng. Co., New York City, in charge of designs and estimates and handled engineering on alterations to timber dock and construction of steel trestle and unloading tower for Taintor Mfg. Co. (\$125 000) at Bayonne, N. J., in charge of grade and alignment on construction of reinforced concrete subaqueous intake tunnel, Brooklyn Edison Co. (\$100 000), Bay Ridge; designed and supervised construction of reinforced concrete circular coal-storage bins (1 000 tons), ash bin (250 tons) and charging floor, Consolidated Gas Co. (\$60 000), New York City. *TT 0.9: P 0.9: RC 0.9: D 0.9.* July 1924 to date Mgr. Masonry Construction, Stewart & Bennett, Inc., Gen. Contrs., Rochester, N. Y., in administrative charge of designs, estimates and construction on commercial and industrial buildings, also testimony on buildings and appraisals. *TT 2.2: P 2.2: RC 2.2: D 2.2. TT 18.3: SP 2.5: P 15.8: RC 12.7: D 11.7.* Refers to E. A. Fisher, C. C. Hopkins, R. B. Jeffers, I. E. Matthews, J. A. O'Connor, C. A. Poole, J. F. Skinner, J. R. Taft.

1425

(1) **NARASIMHAM, RASIPUR DASA**, Assoc. M., Town Planning Asst., Ft. St. George, Madras, India. (Elected Aug. 4, 1924.) (Age 30. Born Salem, India.) 1918 B. E., Madras Univ. 1919 M. E., Govt. Coll. of Eng., Madras. *TT 2: SP 2.* 1918 to 1919 Apprentice Engr., Govt. Public Works workshops, Madras. *TT 1: P 1: D 1.* 1919 to 1920 Special Asst. Engr., Chingleput Dist. Board and Personal Asst. to Dist. Board Engr., Chingleput, Madras. *TT 1: P 1: RC 1: D 1.* 1920 to 1923 Public Works Asst. Engr., Sivaganga, Zemindary, Court of Wards (Govt. of Madras), Madras. *TT 3.5: P 3.5: RC 3.5.* Jan. 1924 to date Personal Asst. to Director of Town Planning and at present Officiating Director of Town Planning, Govt. of Madras. *TT 2.9: P 2.9: RC 2.9. TT 10.4: SP 2: P 8.4: RC 7.4: D 5.5.* (Applies in accordance with Sec. 1, Art. 1, of the By-Laws.)

1426

(12) **PANHORST, FREDERICK WILLIAM**, Assoc. M., Box 848, Everett, Wash. (Elected Jan. 15, 1923.) (Age 33. Born Mexico, Mo.) 1915 B. S. in Civ. Eng., Univ. of Ill. *TT 2: SP 2.* Summers 1909 to 1913 Rodman, Chainman and Transitman, City of Staunton, Ill., and Consolidated Coal Co., Staunton. June to Sept. 1914 Rodman, Rock Island R. R. Oct. 1915 to March 1917 Asst., Engr. Corps, Pennsylvania R. R., and Vandalla R. R., St. Louis, Mo., on design of concrete structures, arches, over and under crossings between Indianapolis and Frankfort, Ind., new line. *TT 1.4: P 1.4: D 1.4.* March to May 1917 Draftsman, A. E. Staley Mfg. Co., Decatur, Ill., on design of mill buildings and equipment for starch plant. *TT 0.2: P 0.2: D 0.2.* May 1917 to Sept. 1919 Ship Draftsman, Puget Sound Navy Yard, Bremerton, Wash., on design and naval architecture calculations, including experiments, submarine tests, etc. *TT 2.1: P 2.1: RC 1.5: D 1.5.* Sept. 1919 to May 1920 Asst. Bridge Engr., Missouri, Kansas & Texas R. R., Dallas, Tex., on design, inspection, etc. of concrete and steel bridges. *TT 0.7: P 0.7: RC 0.7: D 0.7.* May 1920 to Jan. 1921 Designer, Anaconda (Mont.) Copper Min. Co., on concrete and steel smelter structures and equipment for new South American project. *TT 0.6: P 0.6: RC 0.3: D 0.6.* July 1921 to date Res. Bridge Engr., Washington State Highway Dept., at Olympia, Wash., and past 1½ years at Everett, Wash.; in charge of timber, steel and concrete construction of bridges; at present in charge of Everett-Marysville Cutoff Project (\$1 000 000, two electrically-operated swing spans and one vertical lift). *TT 5.3: P 5.3: RC 5.3: D 5.3. TT 12.3: SP 2: P 10.3: RC 7.8: D 4.9.* Refers to C. E. Andrew, C. A. Ellis, M. L. Enger, F. T. Sheets, A. N. Talbot, W. M. Willson.

1427

(5) **RAFTER, CASE BRODERICK**, Assoc. M., 907 Fifteenth St. N. W., Washington, D. C. (Elected Oct. 10, 1921.) (Age 36. Born Washington, D. C.) 1913 C. E., Lehigh Univ. TT 2: SP 2. June to Sept. 1912 and June to Nov. 1913 Engr. for Chas. Henry Butler at Wiscasset, Me., on surveys, water supply, sewerage system and general construction of estate. TT 0.4: SP 0.4: RC 0.4. May 1912 (2 weeks), Oct. 1914 to July 1915 and Oct. 1915 to March 1916 Draftsman, Eng. Dept., Washington, D. C., drafting and estimating in Sewer Dept. TT 1.2: SP 1.2. March to June 1916 Supt., West Constr. Co., in charge of construction of 3-story reinforced concrete building. TT 0.2: SP 0.2: RC 0.2. 1916 to 1917 Structural Designer, Southern Bldg. Supply Co., reinforced concrete designs, estimates and details. TT 0.7: P 0.7: RC 0.7. 1917 to March 1919 with Corps of Engrs., U. S. Army, as 1st Lieut. and Capt., until June 1918 with troops, then Asst. Dépt. Engr., Phil. Dept. TT 1.9: SP 1.9. May 1919 to date Cons. Engr., structural designs and supervision, Mayflower Hotel (with H. G. Balcom), Rust Office Bldg., Racquet Club, etc.; valuations, shore properties Norfolk County ferries for U. S. Housing Corporation, apartment buildings; warehouses and industrial plants. TT 7.5: P 7.5: RC 7.5: D 7.5. TT 13.9: SP 5.7: P 8.2: RC 8.8: D 7.5. Refers to H. G. Balcom, R. J. Fogg, T. W. Marshall, A. E. Phillips, C. H. Tompkins.

1428

(13) **RHODES, CLAUDE IRVIN**, Assoc. M., 820 Colusa Ave., Berkeley, Cal. (Elected Junior March 5, 1907; Assoc. M., March 1, 1910.) (Age 48. Born Clarksburg, Cal.) 1902 B. S., Univ. of Cal. TT 2: SP 2. May to Nov. 1902 Sextant Observer, etc., U. S. Coast and Geodetic Survey, charting Prince William's Sound, Alaska. TT 0.5: SP 0.5. Dec. 1902 to Aug. 1903 Supt., Sterling Gold & Copper Co., in charge of developing small copper mine in Cochise County, Ariz. TT 0.7: P 0.7: RC 0.7. Nov. 1903 to July 1904 Field Draftsman, Bay Cities Water Co., Coyote, Cal., mapping, stream gaging, computing, etc. TT 0.7: SP 0.7. Aug. 1904 to Jan. 1905 Inspector, Kern River Co. (now Southern California Edison Co.), on concrete lining in Borel Canal. TT 0.4: SP 0.4. Feb. to May 1905 Stream Gauger, Bay Cities Water Co., Madrone Springs station, gauging Coyote River and tributaries. TT 0.3: SP 0.3. May 1905 to May 1906 and Jan. 1907 to Dec. 1909 Asst. Engr., Monterey County Water Works, Monterey and San Francisco, Cal., designed plant and had charge of manufacture of 22-in. riveted steel pipe, and designed and constructed 23 miles of scenic auto roads on Monterey Peninsula. TT 3.9: SP 1.7: P 2.2: RC 2.2: D 0.6. May 1906 to Jan. 1907 Draftsman, Bay Cities Water Co., San Francisco, drafting and computing proposed Sierra supply for San Francisco. TT 0.7: SP 0.7. Dec. 1909 to Jan. 1913 Inspecting Engr., Merchants Association and Chamber of Commerce, San Francisco, on pavements, sewers, buildings, high pressure fire system, reservoirs, cisterns, etc. TT 3.1: P 3.1: RC 3.1. March 1913 to March 1915 Asst. Engr., Panama-Pacific International Exposition, San Francisco, in charge in field of construction and operation and (in part) of design of water-supply and fire-protection systems of Exposition. TT 2: P 2: RC 2: D 0.2. March to Aug. 1915 Asst. Engr., Hydr. Div., California R. R. Comm., on valuation and regulation of public utilities. TT 0.4: P 0.4: RC 0.2. Aug. 1915 to April 1916 Asst. Engr., Hunter & Hudson, Cons. Engrs., San Francisco, computing, drafting, inspecting, surveying, designing and constructing power plants, irrigation works, street and highway work, subdivision, water supply, etc. TT 0.7: SP 0.5: P 0.2: RC 0.2: D 0.2. April to June 1916 Asst. Engr., Hyde, Wilhelm & Miller, on estimate of cost of Sierra water supply for Sacramento, Cal. TT 0.2: P 0.2: D 0.1. June to Dec. 1916 Engr., Producing Dept., Standard Oil Co. of California, surveying, mapping, designing and constructing in oil fields of Southern California. TT 0.5: SP 0.2: P 0.3: RC 0.5: D 0.3. Jan. to March 1917 Asst. Engr., Hunter and Hudson, San Francisco, on design and estimate of cost of water supply for Palos Verdes Project near Los Angeles. TT 0.2: P 0.2: D 0.2. March 1917 to Nov. 1918 Engr., Putah Creek Riparian Defense Assoc., Central California, in charge of field data, involving water supply, underground conditions, irrigation, etc. TT 1.7: P 1.7: RC 1.7. Nov. 1918 to May 1921 Asst. Engr. and May 1921 to March 1923 Hydr. Engr. in charge of Hydr. Div., California R. R. Comm., on regulation of public water utilities. TT 4.3: P 4.3: RC 4.3. March 1923 to date member of firm, The Loveland Engrs., Inc., Cons. Civ. Engrs., San Francisco, on regulation of public utilities, design, construction, operation, finance, valuation, irrigation, etc., principally hydraulic matters. TT 3.7: P 3.7: RC 3.7: D 1. TT 26: SP 7: P 19: RC 18.6: D 2.6. Refers to P. Bailey, E. R. Bowen, E. E. Carpenter, H. D. Dewell, G. A. M. Elliott, N. R. Ellis, A. J. Grier, H. L. Haehl, W. Hall, S. T. Harding, P. E. Harroun, H. Hawgood, F. C. Herrmann, W. L. Huber, C. H. Lee, H. B. Lynch, C. D. Marx, H. A. Noble, C. B. Wing.

1429

(7) **STREIFF, ABRAHAM**, Assoc. M., 115 East South St., Jackson, Mich. (Elected March 16, 1925.) (Age 46. Born Sidohardjo, Java.) 1901 C. E., Royal Pol. School, Delft, Holland. *TT 2: SP 2.* Dec. 1901 to Nov. 1902 Asst. Engr. on harbor works, Rotterdam, Holland, quay walls, dredging, revetments, jetties, marine surveying. *TT 0.9: P 0.9.* Nov. 1902 to April 1903 Asst. Engr. on work of relocating Meuse Estuary, Breda, Holland, design and construction of drawspan at Dintel. *TT 0.4: P 0.4: RC 0.4.* April 1903 to March 1904 and March to Aug. 1907 Asst. in hydraulic engineering, Federal Polytechnikum, Zurich, Switzerland, also post-graduate studies. *TT 1.5: P 1.5.* March 1904 to March 1907 Engr., Colonial Govt., Dutch Guiana, on harbor and drainage works. *TT 3: P 3: RC 3.* 1907-1909 drafting work for New Jersey Cement Constr. Co., Newark, N. J., Hydr. Eng. Dept. of Ludlow Valve Co., Troy, N. Y., and for Camden (N. Y.) Water Wheel Works. *TT 2: P 2: D 2.* 1910 to 1922 Engr. (after 1914 partner), Wm. G. Fargo, Jackson, Mich., consulting engineering, chiefly dams and hydro-electric and steam plants. *TT 12: P 12: RC 6.* 1922 to date Cons. Engr., on design and construction of dams for Bangor (Me.) Hydro-Elec. Co., Cumberland County Power & Light Co., Portland, Me., and design of Rasgao Dam for Sao Paulo Traction & Light Co. *TT 4: P 4: RC 4.* *TT 25.8: SP 2: P 23.8: RC 13.4: D 2.* Refers to W. G. Fargo, C. B. Hawley, R. E. Horton, W. E. Mott, F. Nagler, J. F. Vaughan, W. M. White, G. S. Williams.

1430

(2) **TIPPET, HENRY JACKSON**, Assoc. M., 120 Westwood Road, New Haven, Conn. (Elected March 4, 1914.) (Age 42. Born Bebbington, Cheshire, England.) Sept. 1905 to Jan. 1907 Asst. Engr., under City Engr., Liverpool, England, on outfall sewer, incinerator and tramway construction, road improvements, paving, refuse disposal, etc. *TT 1.3: P 1.3.* April to Dec. 1907 and April to Dec. 1908 with Canadian Pacific R. R., Irrigation Dept., as Rodman on instrument work, drafting, etc., survey of Irrigation ditches (300 miles) after April 1908 on cross sectioning, supervision of contractors on ditch construction, etc. *TT 1.3: SP 1.3.* Jan. 1909 to Nov. 1915 with British Columbia Elec. Ry. Co., until Jan. 1911 as Asst. Engr. on special trackwork design, track construction and maintenance, Vancouver, B. C., then Engr. of Way, Vancouver and suburbs (about 200 miles), after Jan. 1914 in responsible charge under Chf. Engr. *TT 6.7: P 6.7: RC 1.8: D 1.5.* April 1916 to April 1917 Roadmaster, New York & Stamford Ry. Co., Portchester, N. Y., on supervision of construction and track maintenance between Norwalk, Conn. and New Rochelle, N. Y. *TT 1: P 1.* April 1917 to date with The Connecticut Co., New Haven, Conn., until April 1921 Asst. Engr., Hartford, Middletown and Torrington Divs., on estimates, reports and supervisory duties, and since then Div. Engr., in responsible charge of 280 miles of track construction and maintenance (\$1 400 000) on Hartford, Meriden, New Britain and Middletown Divs. *TT 9.5: P 9.5: RC 5.5: D 6.5.* *TT 19.9: SP 1.3: P 18.6: RC 7.3: D 9.8.* Refers to G. R. G. Conway, W. R. Dunham, Jr., C. C. Elwell, G. E. Hamlin, L. F. Peck, J. P. Wadhams, E. W. Wiggin.

1431

(10) **WALDROP, JOHN DOUGLAS**, Assoc. M., Care, State Highway Comm., Raleigh, N. C. (Elected April 25, 1921.) (Age 39. Born Norfolk, Va.) 1908 M. E. Va. Pol. Inst. *TT 2: SP 2.* Sept. 1909 to June 1910 Draftsman with Benson & Drummer, Cons. Engrs., Norfolk, Va., surveys, paving, sea wall construction, creosote timber inspection, machine design, etc. *TT 0.7: P 0.7.* June 1910 to March 1911 Levelman, Transitman and Chf. of Party, Richmond Cedar Works, Dismal Swamp, Va., on location of lumber road. *TT 0.8: P 0.8: RC 0.2.* June 1911 to March 1915 Asst. Engr. M. of W., Virginia Ry. & Power Co., Norfolk, Va., in charge of surveys, bridge and trestle design, maintenance of tracks and bridges, design of layouts, storage tracks, car barns, etc. *TT 3.8: P 3.8: RC 3.8.* April 1915 to July 1917 County Engr., Guilford County, in charge of construction of hard surface road; supervised construction of 23 miles of highway (concrete base, Warrenite surfacing) prepared specifications, contracts, etc. *TT 2.2: P 2.2: RC 2.2.* July 1917 to date with N. C. State Highway Comm., as follows: July 1917 to Feb. 1918 Res. Engr., in charge of party on location surveys in Guilford and Rockingham Counties; Feb. 1918 to Nov. 1919 Div. Office Engr., Greensboro, N. C., on road plans and estimates for Federal Aid Projects, inspection of survey locations, office accounts, etc.; Nov. 1919 to May 1921 Div. Engr., in charge of construction and location in Div. No. 2 (31 counties) (estimated cost \$5 000 000); May 1921 to June 1926 Dist. Engr. Greensboro, in charge of construction (\$10 000 000) and maintenance (approx. 700 miles) in Dist. No. 5; since June 1926 Asst. State Highway Engr., Raleigh, N. C. *TT 9.4: P 9.4: RC 7.6.* *TT 19: SP 2: P 17: RC 13.9.* Refers to W. S. Fallis, F. T. Miller, P. C. Painter, J. H. Pratt, R. E. Snowden, G. F. Syme, G. C. White.

1432

(12) WILLIAMS, GUY MORRIS, Assoc. M., Univ. of Saskatchewan, Saskatoon, Saskatchewan Canada. (Elected Jan. 13, 1919.) (Age 38. Born Crete, Nebr.) 1911 B. S. in C. E., Univ. of Nebr. TT 2: SP 2. Aug. 1911 to Aug. 1915 Laboratory Asst. in Eng., and Aug. 1915 to Sept. 1920 Asst. Engr. Physicist, Bureau of Standards, Washington, D. C., engaged as follows: 1912 to 1913 in charge of Cement Testing Laboratory, Northampton, Pa., inspecting, testing and shipping cement for Panama Canal; 1913 to 1917 field and office work, investigation of durability of concrete in alkali soils in co-operation with Reclamation Service, etc., including assistance in preparing tests, supervision of manufacture and installation of drain tile, design of portable hydraulic tile-testing machines, yearly tests of tile in field at each project, etc.; 1915 designed structural steel work for panel testing furnace and supervised erection; 1917 to 1919 general construction work, remodeling buildings for war test purposes, construction of wind tunnel laboratory; two buildings for airplane engine tests; structural design and construction of reinforced concrete vacuum chamber for altitude tests of airplane engines; superintended construction of two reinforced concrete frame, brick and limestone veneer laboratory buildings (approx. cost \$250 000 and \$1 000 000); studies of concrete mixtures, etc. TT 9: P 9: RC 7.6: D 1. Sept. 1920 to date Prof. of Civ. Eng., Univ. of Saskatchewan; also since 1921 Secy., Comm. on Deterioration of Concrete in Alkali Soils, Eng. Inst. of Canada, supervising preparation and inspection of field work, and (1925) on structural design of reinforced concrete engineering laboratory; July to Sept. 1923 Cons. Engr., U. S. Bureau of Standards. TT 6.2: P 6.2: RC 6.2: D 0.2. TT 17.2: SP 2: P 15.2: RC 13.8: D 1.2. Refers to A. S. Dawson, L. R. Ferguson, R. A. Hart, J. Y. Jewett, J. R. C. Macredie, S. H. McCrory, R. J. Wig.

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(7) YOUNG, GEORGE RICHMOND, Assoc. M., 1068 Murray Ave., Milwaukee, Wis. (Elected Jan. 19, 1920.) (Age 41. Born Milwaukee, Wis.) 1912 B. C. E., Univ. of Mich. TT 2: SP 2. Aug. 1905 to Aug. 1906 Rodman and Instrumentman, June to Oct. 1907 Instrumentman, June to Oct. 1908 Inspector on dredge and dock work at Kenosha, Wis., and Waukegan, Ill., June to Oct. 1909 Instrumentman on a U. S. Survey steamer, June to Oct. 1911, June to Nov. 1912 and April to Nov. 1914 Inspector, harbor work, breakwater construction, Manistique, Mich., Nov. 1912 to June 1913 Inspector and Draftsman, Sault Ste. Marie, Mich., and June 1913 to April 1914 Surveyor, triangulation, Milwaukee harbor line survey, survey of Wolf River, all for U. S. Engr. Office. TT 3.5: SP 3.5. Nov. 1914 to Jan. 1915 Draftsman, City Engr.'s Office, Milwaukee, Wis. TT 0.2: SP 0.2. Jan. 1915 to Oct. 1919 with Sewerage Comm., Milwaukee, surveys, construction of sewers in open cut and tunnels, subaqueous tunnels by pneumatic process and shields, sinking caissons, construction of disposal plant, design of underground structures and of shore protection work. TT 4.8: P 4.8: RC 4.8: D 1.5. Oct. 1919 to Nov. 1921 Asst. Supt. and Field Engr. for Klug & Smith, on design and construction of plant, layout and construction of mill buildings and concrete viaduct. TT 2: P 2: RC 2: D 0.5. Nov. 1921 to date with Sewerage Comm., City of Milwaukee, until Nov. 1922 as Div. Engr. on topographic surveys and supervision of sewer construction, and since then Asst. Engr., organizing and supervising field engineering force for Metropolitan Sewerage Comm.; supervising construction of sewers and sewage-pumping stations, including sanitary sewers for suburbs, surveys, changes in design, etc. TT 5: P 5: RC 5: D 2.2. TT 17.5: SP 5.7: P 11.8: RC 11.8: D 4.2. Refers to J. L. Ferebee, W. D. Gerber, T. C. Hatton, R. R. Lundahl, J. C. Meem, E. L. Pflanz, J. C. Pinney, W. J. Sando, D. W. Townsend.

FROM THE GRADE OF JUNIOR

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(14) FOWLER, WARREN GLENN, Jun., Care, City Engr., St. Joseph, Mo. (Elected Dec. 4, 1922.) (Age 30. Born Vandalia, Mo.) 1919 B. S. in Eng., and 1920 C. E., Univ. of Mo. TT 2. June to Sept. 1918 Transitman with Pride & Fairley, Civ. Engrs., Blytheville, Ark. May to Sept. 1919 Transitman, St. Louis & San Francisco R. R., maintenance of way, in responsible charge of surveys for industry tracks, including office work and estimates, drainage investigations, bridge cutoffs, relining main tracks, valuation work. TT 0.3: RC 0.3. 1919 to 1920 post-graduate work, Univ. of Missouri, and one-half of time (total 4 months) Research Asst., Eng. Experiment Station on preparation of bulletin on water resources of Missouri; made computations of stream and spring flow and some maps and diagrams. TT 0.4. May 1920 to May 1923 Structural and Mech. Designer, Heyl & Patterson, Inc., Pittsburgh, Pa., general design and estimating on conveying machinery, coal tipples, coke plants, bins, railroad coal pockets, industrial and mine cars, pig iron casting machines, skip

holsts and car hauls. *TT 3: D 3.* May 1923 to Aug. 1926 with Bureau of Bridges, Missouri State Highway Comm., until May 1924 as Special Designer of continuous slabs and girders, concrete arches, and checking superstructure of three Missouri River bridges; after May 1924 Chf. Draftsman, in charge of drafting room on bridge plans and standards; prepared plans for over 400 bridges, including fourteen concrete arches and one steel cantilever. *TT 3.2: RC 2.2: D 1.* Aug. 1926 to date Bridge Engr., Board of Park Commrs., St. Joseph, Mo., in charge of preliminary study, design and erection of ten bridges for parkway and boulevard extension. *TT 0.2: RC 0.2: D 0.2.* *TT 9.3: RC 2.7: D 4.2.* Refers to C. W. Brown, A. L. Hyde, E. J. McCaustland, B. H. Piepmeyer, W. M. Spann, G. J. Walker.

1435

(1) **KNOX, HAROLD WATERMAN**, Jun., 463 West 140th St., New York City. (Elected Dec. 4, 1922.) (Age 30. Born Westfield, Mass.) 1921 C. E., Rens. Pol. Inst. *TT 2: SP 2.* 1921 to 1922 surveying and Instrumentman for V. E. Barnes, Westfield, Mass. *TT 1: SP 1.* 1922 to 1923 Transitman, Massachusetts Highway Comm., inspection, drafting, lines and grades. *TT 1: SP 1.* 1923 to 1924 Rodman, Boston & Albany R. R. *TT 1: SP 1.* 1924 to 1925 Asst. Res. Engr. with J. A. L. Waddell, on North End Bridge, Springfield, Mass. *TT 1: P 1: RC 1.* April to Oct. 1926 Instrumentman, The Port of New York Authority, Elizabeth, Howland Hook Bridge. *TT 0.5: SP 0.5.* July 1925 to April 1926 and Oct. 1926 to date with P. T. Cox Contr. Co., Inc., as Contr.'s Engr., on Matanzas River Bridge, St. Augustine, Fla. and Highbridge, New York City. *TT 0.8: P 0.8: RC 0.8.* *TT 7.3: SP 5.5: P 1.8: RC 1.8.* Refers to W. J. Boucher, S. Hardesty, R. S. Moore, R. T. Robinson, G. S. Thompson, J. A. L. Waddell.

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(11) **McCULLOUGH, JAY WHEELOCK**, Jun., 1626 Florence St., Aurora, Colo. (Elected Aug. 23, 1922.) (Age 26. Born Clarendon, Ark.) 1921 B. S. in C. E., Ga. School Tech. *TT 2: SP 2.* June 1922 to Feb. 1923 Structural Draftsman, William N. Bowman Co., Archts. and Engrs., Denver, Colo. *TT 0.7: SP 0.3: P 0.4.* April 1923 to date Structural Designer, and since March 1926 also Office Engr., Shankland, Ristine & Co., Denver, Colo., on engineering designs for reinforced concrete and structural steel buildings, grain elevators, concrete water tanks, sewerage systems, water supply, etc., including Colorado University Hospital (\$1 000 000), Lake Junior High School (\$800 000) (both concrete), Republic Building (steel, 12 stories \$1 300 000), Colorado Hotel, Grand Junction, Colo., Junior High School, Pueblo (\$350 000) and Denver Y. W. C. A. Bldg. (steel and concrete \$350 000), concrete water tank at Fort Worth (1 000 000 gal.) and at El Paso (2 300 000 gal.), Tex sewage-disposal plant, Hugo, Colo., and grain elevators (60 000 bu.) at Hastings and Fremont, Nebr. *TT 3.7: P 3.7: RC 1.3: D 1.7.* *TT 6.4: SP 2.3: P 4.1: RC 1.3: D 1.7.* Refers to C. A. Betts, W. B. Freeman, S. O. Harper, C. H. Howell, R. G. Shankland, W. R. Weber.

1437

(2) **RICH, GEORGE ROLLO**, Jun., Care, Stone & Webster, Inc., 147 Milk St., Boston, Mass. (Elected March 7, 1921.) (Age 30. Born Worcester, Mass.) 1919 B. S., Worcester Pol. Inst. *TT 2: SP 2.* Oct. 1919 to Dec. 1921 Draftsman (6 months) and Designer (1½ years) on foundations and reinforced concrete structures for steam, hydraulic and industrial plants, and March to June 1922 Draftsman (reinforced concrete) on construction of Delaware Station for Philadelphia Elec. Co., all for Stone & Webster, Inc., Boston, Mass. *TT 2.5: SP 0.8: P 1.7: RC 1: D 1.7.* June 1922 to June 1924 with McClellan & Junkersfeld, New York City, Designer (1 year) and Reinforced Concrete Engr. (1 year), on design and supervision of design, details and estimates for 400 000-h. p. steam electric station on Mississippi River at St. Louis for North American Company. *TT 2: P 2: RC 2: D 2.* Jan. 1925 to date Hydr. Designer, Stone & Webster, Inc., hydraulic structures on Conowingo Project for Susquehanna Power Co. *TT 1.8: P 1.8: RC 1.8: D 1.8.* *TT 8.3: SP 2.8: P 5.5: RC 4.8: D 5.5.* Refers to R. W. Atwater, R. W. Burpee, H. T. Campion, A. G. Cherry, A. W. French, P. Junkersfeld, L. N. Reeve.

1438

(1) **SCHOEN, BERTALAN**, Jun., 2240 Ryer Ave., Bronx, New York City. (Elected March 16, 1925.) (Age 31. Born Satoraljaújhely, Hungary.) 1922 C. E., Royal Josephus Univ., Budapest, Hungary. *TT 2: SP 2.* June to Sept. 1914 Draftsman with Katona Bela, C. E., Satoraljaújhely, Hungary, topographical drafting, mapping. *TT 0.3: SP 0.3.* May 1922 to June 1923 Designer and Draftsman with Carl Korn Baugesellschaft, A. G. Vienna, Austria, designing and detailing reinforced concrete buildings. *TT 1.1: SP 0.6: P 0.5: RC 0.5: D 0.5.* July to Dec. 1923 Cons. Engr. (owner) Bartholomeus Schon, special bureau for reinforced concrete constructions, Vienna, designing, estimating and detailing. *TT 0.5: P 0.5: RC 0.5: D 0.5.* March to April 1924 with Herbert S. Swan, City Planner, New York City, on topographical drafting and city planning. *TT 0.1: SP 0.1.* April to May 1924 Reinforced

Concrete Detailer, Kalman Steel Co., New York City. *TT 0.1: SP 0.1.* June 1924 to May 1925 Draftsman, New York Edison Co., New York City, mapping, survey of current-distribution system in Borough of Manhattan, New York. *TT 0.9: SP 0.9.* May 1925 to date Engr. with Jno. T. McCoy, Inc., Engrs., designing, estimating and detailing reinforced concrete buildings. *TT 1.4: SP 0.5: P 0.9: RC 0.9: D 0.9.* *TT 6.4: SP 4.5: P 1.9: RC 1.9: D 1.9.* Refers to J. F. Krakauer, G. A. Orrok, W. F. Reeves, H. B. Seaman, E. M. Van Norden.

1439

(7) **WELSH, JOHN ROBERT**, Jun. 717 West Sixth Ave., Ashland, Wis. (Elected Oct. 21, 1924.) (Age 25. Born Peoria, Ill.) 1924 B. S. in Civ. Eng., Univ. of Ill. *TT 2: SP 2.* June to Sept. 1919 Rodman and Chainman with County Surveyor, Peoria County, Ill. *TT 0.3: SP 0.3.* June to Sept. 1920 Instrumentman, and Sept. 1920 to Oct. 1921, March to Sept. 1922 and June to Sept. 1923 Res. Engr., inspection, instrument work, plans and estimates on construction, Michigan State Highway Dept. *TT 1.3: SP 1.3.* July to Oct. 1924 Asst. Engr., and Oct. 1924 to date Engr., The L. E. Myers Co., Chicago, Ill., until Oct. 1924 on instrument and estimate work, Dix Dam, Burgin, Ky.; Oct. 1924 to Sept. 1925 Contr.'s Engr. on Dix Dam, supervising construction, planning plant layout, etc., design of forms and trestles, supervising subcontracts, general estimates, etc.; since 1925 investigating water power sites, supervising surveys, measurements of stream flow, maps and preliminary design, etc. *TT 2.4: P 2.4: RC 2.1: D 0.1.* *TT 6: SP 3.6: P 2.4: RC 2.1: D 0.1.* Refers to G. H. Ellis, M. L. Enger, P. C. Gillette, L. F. Harza, G. W. Howson, M. S. Ketchum, A. L. Nelson, C. A. Petry.

The Board of Direction will consider the applications in this list not less than thirty days after the date of its issue.